

# Gratitude at Work

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# **GRATITUDE AT WORK**

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## ABSTRACT

My dissertation builds theory about gratitude at work. Drawing from Affective Events Theory, I suggest two different forms of gratitude: state gratitude and job gratitude. State gratitude refers to grateful moods or emotions which tend to last short term, whereas job gratitude refers to employees' grateful attitudes particularly toward their jobs that tend to last longer. Empirically, I conducted three related studies.

In the first study, I developed and validated the 7-item measure of job gratitude using a series of surveys that confirmed a satisfactory content and construct validity of the measure. Using an experience sampling procedure, in the second study I suggested and tested a theoretical model of state gratitude at work. A series of longitudinal surveys with 135 employees showed that state gratitude that is captured by a 3 week long daily survey is positively associated with in-role behaviors through the desire to reciprocate benevolence. My analyses also showed that the availability of extrinsic job rewards negatively moderates the positive impact of state gratitude on helping behaviors through the desire to reciprocate benevolence. Employees' job dependency also negatively moderates the positive impact of state gratitude on both helping and in-role behaviors through the desire to reciprocate benevolence. The third study proposed and tested a theoretical model of job gratitude. My analyses showed that through the mechanism of intended help, job gratitude is positively associated with extra-role behaviors including helping behaviors, organizational citizenship behaviors directed to an organization, and voice behaviors.

Taken together, my dissertation enriches theories in emotion literature by exploring a particular type of discrete, social, and moral emotions. My dissertation also contributes to gratitude literature outside of organizational studies, as it broadens the scope of impacts of gratitude in work contexts. Lastly, this dissertation contributes to Organizational Positive Scholarship by shedding light on the experiences of the recipients' of prosocial behaviors.

## ACKNOWLEDGEMENTS

It has been a great privilege for me to write a dissertation on what I believe is such an important topic both academically and personally: gratitude. My entire dissertation itself is a lengthy, scientific, and authentic reflection of my deepest gratitude to many people who have empowered me to what I do, and who have enabled me to be where I am.

At the very core of my theorizing—what leads to the experience of gratitude at work and how this gratitude influences people's work behaviors—there were my own "grateful experiences at work" with many people. I often felt state gratitude responding to others' thoughtful and caring actions, and I can attest to its strength as a motivator. With an extreme amount of gratitude toward my job as a researcher (a.k.a. "job gratitude"), the following is my less scientific and shorter letter to those to whom I'm grateful, who make my job special and blessed.

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## CHAPTER 1. GRATITUDE AT WORK: INTRODUCTION

*“I’m grateful that I have a really great manager. Some people don’t have good managers, and I’m very grateful (for) my manager .... I do have weaknesses—we all do. He’s very open to giving me the opportunity to work on those weaknesses and not looking at those as a bad thing: ‘you’re bad at this, therefore we must...’, but ‘here’s an area that you need to work on, and let’s provide you opportunity.’” (An anonymous interviewee, a finance professional)*

Benefits of experiencing gratitude have been increasingly reported and emphasized. Many CEOs and other leaders explicitly thank their employees and customers, and express their gratitude in company letters, annual reports, websites, and through public media. Business practitioners and consultants host gratitude interventions in many organizations, with the aim of enabling as many employees as possible to benefit from experiencing gratitude (e.g., <http://www.odonatacoaching.com>; <http://www.lvsconsulting.com/>). Along this line, studies in many academic disciplines, particularly in social psychology, have shown the benefits of experiencing gratitude, such as life satisfaction, optimism, subjective well-being, physiological health, and evolutionary fitness (cf., Emmons & McCullough, 2004; Froh, Sefick, & Emmons, 2008).

Despite such acknowledgement of the importance of gratitude by business leaders and other disciplines, there has been little theoretical or empirical attention to gratitude at work by organizational behavior scholars. This limited research reflects insufficient understandings of two issues in the field of organizational behavior: 1) the conceptual definition of what gratitude is in the work context, and 2) the experience of receivers in many social interactions in workplaces.

First, gratitude has not been adequately conceptualized in management research. The construct of gratitude has been broadly and variously defined in extant literature in other academic disciplines. For example, in theology, philosophy, sociology, and social psychology, gratitude has been considered part of human nature, a social or moral virtue, a capacity, an emotion, a disposition, and a motive (e.g., Bertocci & Millard, 1963; Lazarus & Lazarus, 1994; McCullough, Emmons, & Tsang, 2002; Ortony, Clore, & Collins, 1988; Spence, Keeping, Brown, & Lian, 2013; Weiner, 1985). The term “gratitude” in management research, however, has been used without a specific definition. Although a few studies have referred to gratitude, such work has defined gratitude vaguely. For example, these studies considered gratitude as a sort of reaction to mentors or as an expressive feedback from leaders (e.g., Grant & Gino, 2010; Kram, 1983), without specifying to which, among the aforementioned definitions of gratitude, form they are referring. Nor have these studies examined whether any of those definitions fit into the work-related phenomena that they attempt to explain.

The experience of gratitude, particularly at work, however, may require a more refined conceptualization than the existing ones, as it may be mostly directed toward certain events (e.g., receiving help) and entities (e.g., one’s job) in work contexts. Gratitude at work may be different from gratitude toward something broad and vague, such as one’s life in general or God, that social psychologists and theologians have mostly focused on (e.g., Camenisch, 1981; Emmons & Crumpler, 2000). A clear conceptualization of gratitude in work contexts is important for achieving a better, more systematic understanding of when and how employees not only evaluate, but also appreciate their interactions and interdependence with others at work, and how such positive experiences influence their work attitudes and performance.

Second, there is also little research on the perspective of receivers in general social interactions at work and their cognitive and affective experiences in the process of receiving. Studies of organizations have extensively explored the perspective of givers in social interactions, and how their acts of giving influence their work attitudes and behaviors (e.g., Cropanzano & Mitchell, 2005; Grant & Wrzesniewski, 2010). More recent studies from this perspective have explored not just normative or instrumental motives of givers, but also prosocial or other-oriented motives—for example, in the giving of prosocial behaviors, compassion, and forgiveness (Aquino, Grover, Goldman, & Folger, 2003; Dutton, Worline, Frost, & Lilius, 2006; Grant, 2008). These studies show the positive consequences of such giving behaviors on givers: high productivity from prosocial behaviors, generation and coordination of resources from compassionate behaviors, and coping from forgiving. These studies commonly investigated what led givers to such behaviors and how these factors influence the givers' subsequent behaviors. Yet, these studies have overlooked the experiences and reactions of those who receive such prosocial, compassionate, and forgiving behaviors from others.

Examining receivers is likewise essential; not every instance of giving is taken or welcomed. Receivers can either accept or reject what is given to them in different ways: being grateful, ungrateful, surprised, or taking gifts for granted (Atoji, 1994). Unintended, negative interpretations of and reactions to a given gift (e.g., help, support, favor, compensations, etc.) can often lead to miscommunication, misunderstanding, and conflicts in organizations. Gratitude, though, is considered the manifestation of positive experience of receiving. In this vein, scholars have considered gratitude as the receivers' agreement and appreciation of givers' intentions and understanding regarding themselves (Mauss, 1990), and also as the most powerful means of continuity and cohesion to social interactions (Simmel, 1950). In work contexts, though, little is

known about when and how gratitude is experienced by receivers, and how gratitude influences receivers' attitudes and behaviors at work. Therefore, my dissertation deals with the following questions: When and how do individual employees experience gratitude at work? How does this experience of gratitude influence the receivers' work-related attitudes and behaviors as well as interactions at work?

To explore these questions, my dissertation consists of two main sections: 1) a literature review and conceptualization of gratitude, and 2) three related empirical studies.

First, in Chapter 2, I review existing studies on gratitude in multiple disciplines, and I identify gaps in the current understanding of gratitude in work contexts, particularly in understanding gratitude that is enduring and particularly toward one's job. Following this, and for the purpose of theory building, in Chapter 3 I define gratitude as positive affect with a perception or belief of receiving a benefit. Drawing upon Affective Events Theory (Weiss & Cropanzano, 1996), I argue that gratitude can exist in two different forms at work—the form of states and of attitudes—and that both of these forms have different roles in determining employees' work attitudes and behaviors. Furthermore, I propose a new construct, “*job gratitude*” referring to attitudinal gratitude particularly toward one's job, which is distinct from the already existing construct of *state gratitude* (e.g., grateful moods and emotions).

Second, I conducted three related empirical studies. The first empirical study (Chapter 4) was to develop and validate the job gratitude measure by following the recommended steps toward developing a valid measure by Hinkin (1998). In my second empirical study (Chapter 5), a theoretical model of state gratitude was developed and tested by conducting a multi-wave survey. In the last empirical study (Chapter 6), I developed and tested a theoretical model of job

gratitude, exploring its antecedents and consequences. A subset of the data collected in Chapter 5 was used for the empirical examinations of Chapter 6.

The findings from these studies may offer significant implications for research on emotions, motivation, and prosocial behaviors in the field of organizational behavior. More specifically, exploring both grateful states and attitudes may help to enhance our understanding of socially-driven, affective experiences at work above and beyond the basic positive or negative affects in workplaces. Furthermore, investigating gratitude in the work context sheds lights on the affective and state-like mechanisms of motivation (Seo, Barrett, & Bartunek, 2004). It departs from the conventional focus in motivation literature, which has been on the dispositional, stable needs and motives, only related to one's roles and self-interests (e.g., Locke & Latham, 2002). It also contributes to prosocial behavior literature, as it explores the experiences of recipients of help or favor, instead of those who provide them in organizational settings (e.g., Grant, 2008).

Exploring gratitude at work is also timely and important for practical reasons. Recent surveys revealed that the majority of employees are neither happy nor grateful about their work (e.g., Shellenbarger, 2012), despite the aforementioned benefits of gratitude that have been increasingly reported (cf., Emmons & McCullough, 2004). Workplaces are often considered as places with only competitive, instrumental, and self-interested people and their various interactions. On the contrary, my dissertation may illustrate when and how employees are grateful to others at work, and how such affective experience positively influences their motivations and other related behaviors. I hope to contribute to understanding positive, generative, sustainable dynamics in organizations that promote individual strengths, relational and collective synergies, and positive deviances (Cameron, Dutton, & Quinn, 2003; Vadera, Pratt, & Mishra, 2013).

## CHAPTER 2. LITERATURE REVIEWS ON GRATITUDE.

The purpose of this chapter is to review existing studies that explored gratitude from different disciplines and contexts. The concept of gratitude has been discussed in different academic disciplines, such as philosophy, theology, sociology, and social psychology. In such literature, gratitude has been viewed as different forms: a trait, state, virtue, sentiment, or capability, for example. I briefly summarize how philosophy, theology, sociology, and earlier social psychology have viewed gratitude similarly and differently. I further summarize how recent studies in social psychology have started to investigate gratitude in a more consistent and systematic way through the lens of affect.

### *1. HISTORICAL BACKGROUND OF GRATITUDE RESEARCH*

The word gratitude is derived from the Latin noun *gratia*, meaning favor, and the adjective *gratus*, meaning pleasing. The Oxford English Dictionary (1989) offers its definition as “the quality or condition of being thankful; the appreciation of an inclination to return kindness” (Emmons & McCullough, 2004). Despite such a simple dictionary definition, multiple views and definitions of gratitude have been provided in diverse disciplines (see Emmons & Shelton, 2002). I summarize three main views of gratitude: gratitude as a virtue, as a social experience, and as affect.

#### **1.1. Gratitude as a virtue in philosophy and theology**

Most early studies on gratitude were conducted in philosophy and theology. Scholars in such disciplines viewed gratitude as a civic virtue (Smith, 1976), a moral virtue (Bertocci & Millard, 1963), or a religious value and norm, (particularly in Christianity and Judaism, e.g., Roberts, 2004; Schimmel, 2004). For example, 13<sup>th</sup> century theologian Thomas Aquinas (1981 version in Emmons & McCullough, 2004) understood gratitude as a secondary virtue associated with the

primary virtue of justice. Other religious scholars also emphasized social functions of gratitude. For example, 20<sup>th</sup> century Christian martyr Dietrich Bonhoeffer (1967 in Emmons & McCullough, 2004) said, "In ordinary life we hardly realize that we receive a great deal more than we give, and that it is only with gratitude that life becomes rich." Within such views, gratitude has been often considered as a human disposition, such as one's enduring capacity or tendency toward experiencing and expressing the feelings of being thankful. Gratitude is therefore considered a personality asset, a talent, or a gift that permeates all of one's social relationships (Komter, 2004). The lack of such virtue—ingratitude—is likewise considered, according to this perspective, an enduring personality characteristic (Dunn, 1946).

## **1.2. Gratitude as a social experience in sociology**

The second perspective of gratitude highlights the experience of gratitude in relation with others in social interactions. Many studies of gratitude in sociology consider three components of gratitude: benefactors (i.e., those who benefit the other), beneficiaries (i.e., those who benefit from the benefactors and who experience gratitude toward them), and benefits which are given by benefactors to beneficiaries (Roberts, 2004; Simmel, 1950). Simmel and other sociologists (Blau, 1964; Emerson, 1976; Simmel, 1950) posited that gratitude originates in the interactions of beneficiaries and benefactors, which leads to social cohesion between them. Specifically, Simmel (1950) argued that gratitude is a "supplement of legal order ... [which] establishes the bond of interaction, of the reciprocity of service and return service, even where they are not guaranteed by external coercion" and thus is "an extraordinarily efficient means of social cohesion." Unlike the views in philosophy and theology, which consider gratitude as a human disposition and virtue, the sociological perspective views gratitude as a situation or experience,

which is the outcome of a particular social interaction and relationship in which beneficiaries are involved.

### **1.3. Gratitude as an affect in early social psychology**

The third perspective considers gratitude a sub-concept of the umbrella term “affect.” For example, William McDougall (1929 in Emmons & McCullough, 2004) viewed gratitude as a secondary emotion that includes awe, admiration, reverence, envy, and resentment. Other scholars have viewed gratitude as a type of emotion that involves attributive and judgmental processes (Weiner, 1985), and also as an empathetic state based on the capacity to understand and empathize with others (Lazarus & Lazarus, 1994).

Specifically, Heider (1958) discussed the situations in which a giver asks and expects a beneficiary to be grateful, and explored the consequences of such situations. Weiner (1985) considered gratitude as an attribution-dependent emotion, as opposed to an outcome-dependent emotion; people feel grateful not based on the favorable or unfavorable outcomes they experience, but based on the attributed cause of situations or outcomes they experience. Ortony et al. (1988) proposed that gratitude is a combination of admiration and joy that occurs when people find value (i.e., admiration) and personal benefit (i.e., joy) from givers’ actions, respectively. Lastly, Lazarus and Lazarus (1994) argued that the experience of gratitude depends on the way in which the giver helps, how the recipient appraises such help, and on the experience of empathy between the giver and recipient. In short, a handful of studies have discussed gratitude, mostly considering it as a kind of affect, although they have not specified the type or form of affect (e.g., emotions, moods, attitudes, and dispositional affectivity) they meant. Including the social psychology perspective, Table 1 summarizes the different views on gratitude in different disciplines in the 20th century.



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## 2. *THE CURRENT CONCEPTUALIZATION OF GRATITUDE: THE AFFECTIVE DISPOSITION AND STATE OF GRATITUDE IN RECENT SOCIAL PSYCHOLOGY*

From the start of 21<sup>st</sup> century, there has been an increasing number of studies in social psychology that exclusively explored the concept of gratitude. Similar to earlier gratitude research in social psychology, such studies have commonly viewed gratitude as a type of affect. These studies, however, further accounted different forms of affect, such as affective disposition (i.e., traits) and states (e.g. Eid & Diener, 1999; Rosenberg, 1998; Watson, Clark, & Tellegen, 1988). Specifically, McCullough and his colleagues (2002; 2001; 2004) explored dispositions, moods, and emotions of gratitude and how they are related to each other. Including their studies, I summarize the extant studies on gratitude in social psychology, broadly dividing them into those that viewed gratitude as an affective disposition and those that considered it an affective state.

### **2.1. Gratitude as an affective disposition**

Gratitude can first be seen in the literature as a form of an affective trait or disposition. Rosenberg (1998:249) defined affective disposition as “stable predispositions toward certain types of emotional responding.” For example, people have high positive affectivity, as their affective disposition tends to experience positive emotions more easily and frequently than others. In the same way, McCullough et al. (2002: 112) define dispositional gratitude 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.” They

developed a self-reported measure of the dispositional gratitude called the Gratitude Questionnaire–6 (GQ-6). The items in this questionnaire included, "I have so much in life to be thankful for," and "As I get older I find myself more able to appreciate the people, events, and situations that have been part of my life history." This study also showed a significant correlation between self-reported and peer-rated dispositional gratitude. Watkins, Woodward, Stone, and Kolts (2003) also developed a similar measure to assess dispositional gratitude, the Gratitude Resentment and Appreciation Test (GRAT). Sample items included, "I feel deeply appreciative for the things others have done for me in my life," and "I think that it's important to pause often to count my blessings."

Using the GRAT measure, McCullough et al. (2002) also showed that dispositional gratitude is related to other individual characteristics, such as higher levels of empathy, religiousness, spirituality, and agreeableness, as well as a lower level of neuroticism. Several following studies also showed that people with high dispositional gratitude tend to show higher positive affect, life satisfaction, psychological well-being, and prosocial motivation. Likewise, these individuals also show lower levels of negative affect, depressive symptoms, aggressive responses, and materialistic attitudes (DeWall, Finkel, & Denson, 2011; Lambert & Fincham, 2011; Lambert, Graham, & Fincham, 2009b; Watkins, Grimm, & Kolts, 2004).

## **2.2. Gratitude as an affective state**

Gratitude has also been investigated as a particular type of state, which is less enduring and easier to change than a disposition. Gratitude has been mostly conceptualized as a type of emotion or emotional state that Rosenberg (1998: 250) defined as "acute, intense, and typically brief psychophysiological changes that result from a response to a meaningful situation in one's environment." Following the definition, McCullough et al. (2001) argued that people experience

the emotion of gratitude when they perceive themselves as recipients of an intentionally given benefit that is valuable to themselves and costly to the givers. They also viewed gratitude as a moral affect, as they emphasized the specialized functions of gratitude in the moral domain. Specifically, they suggested the first function of gratitude is as a moral barometer, because it is a response to other people's generosity, thus indicating the other's moral behaviors. Second, gratitude functions as a moral motive, since gratitude motivates receivers to engage in prosocial behaviors. Last, they argued that gratitude is a moral reinforcer, because expressed gratitude (from receivers to the givers) motivates the givers to behave more prosocially in the future. Related to the second function, they argued that the emotion of gratitude has a particular action tendency, which is "to contribute to the welfare of the benefactor (or a third party) in the future" (McCullough et al., 2001: 252).

Many experimental studies also explored the antecedents and consequences of experimentally induced gratitude. In these studies, the emotion of gratitude was induced by making a situation in which participants are helped by a confederate (e.g., Bartlett & DeSteno, 2006). This situation was created by asking participants to recall and write some favors and gifts that they have received and good opportunities and blessings that they have had before (e.g., Lambert & Fincham, 2011; Mathews & Green, 2010), or by asking them to write a letter about what they were most grateful for in life (Lambert & Fincham, 2011). Similarly (but not in an experimental setting), McCullough et al. (2004) measured the emotion of gratitude by using diaries to report information regarding discrete, gratitude-relevant episodes each day. They also asked participants to list the specific people to whom they felt grateful in the corresponding situation and to rate the intensity of the gratitude elicited by each situation on a Likert scale. Other studies have found that the emotions of gratitude lower aggressive responses, depressive

symptoms, and materialism (DeWall et al., 2011; Lambert & Fincham, 2011; Lambert, Fincham, Stillman, & Dean, 2009a), and increase a sense of coherence (Lambert, Graham, Fincham, & Stillman, 2009c), even after controlling the effect of positive emotions.

Furthermore, McCullough et al. (2004) measured grateful moods, distinguishing them from the emotion of gratitude, following Rosenberg's (1998) views on moods as "intermediate terrain between affective dispositions and emotions." To do so, they conducted a 21-day diary study and used the mean score on three gratitude-related emotion adjectives ("grateful", "thankful", and "appreciative") as the index of grateful moods (Emmons & McCullough, 2003). They explored the link between the emotions, moods, and dispositions of gratitude. Not surprisingly, grateful moods are positively correlated with dispositional gratitude and the emotions of gratitude. They also shared many factors that are highly correlated with all of three forms of gratitude. Grateful moods are positively related to positive affectivity, empathy, subjective well-being, extraversion, and agreeableness, and negatively related to neuroticism. Likewise, these factors share the same correlations with dispositional gratitude and emotions (McCullough et al., 2002). In other words, they showed many findings from dispositional gratitude and emotions of gratitude that can be extended in the form of grateful moods.

In sum, although there are variations in measuring emotions and moods of gratitude, both have similar antecedents and consequences; they are both influenced by one's dispositional gratitude as well as certain external events and situations. Moreover, positive emotions (including the emotions of gratitude) tend to endure due to the emotion/mood congruence and maintenance effects (e.g., Meyer & Allen, 1991), so that the distinction between the two is not always clear cut. Thus, in my dissertation, I call both grateful emotions and moods *state gratitude*, as I consider them both as an affective state, distinct from an affective disposition,

such as dispositional gratitude. I provide a more theoretical definition of state gratitude in Chapter 3.

### 3. *WHAT IS MISSING IN THE EXISTING STUDIES OF GRATITUDE*

Although recent studies which have mapped the concept of gratitude onto the different forms of affect have led to important insights, they are limited in two key ways. First, they have only offered the general implications of gratitude, as they have not taken into account the effects of contexts, particularly work contexts, in which people may experience gratitude. Second, they have overlooked the object-specific and enduring nature of gratitude, such as an employee's long-time gratitude, particularly toward his or her job.

#### **3.1. Gratitude in work contexts**

There has been a surge of research interest in affect not only in social psychology, but also in other applied academic disciplines, such as education, political sciences, and marketing (e.g., Bagozzi, Gopinath, & Nyer, 1999; Goodwin, Jasper, & Polletta, 2009; Linnenbrink, 2006). Studies in organizational behavior research have also explored various aspects of affect in work settings, revealing diverse mechanisms through which affect both shapes and is influenced by people's work lives (e.g., Ashkanasy, Härtel, & Zerbe, 2000; Brief & Weiss, 2002; Fineman, 2000). For example, some have shown that positive and negative emotions are related to work motivation (Seo et al., 2004), employee creativity (George & Zhou, 2007), Organizational Citizenship Behaviors (Cropanzano, Rupp, & Byrne, 2003), negotiation performance (Allred, Mallozzi, Matsui, & Raia, 1997), collaborative work behaviors (Williams, 2007), and team behaviors or commitment (Barsade, 2002). Exploring the roles of affect in organizations has broadened the scope of affect research in general, just as other disciplines have contributed to its advances.

However, when compared to the research on basic, positive and negative, affect, the implications of gratitude research in work contexts have been limited. As one of few examples, Kram (1983) argued that gratitude is a salient emotional experience that protégés feel toward their mentors at work. Similarly, Cotton, Shen, and Livne-Tarandach (2011) showed gratitude as a common theme in the responses to one's career development network. These studies, however, simply reported their observation of gratitude in different work-related contexts. Neither did they define what they meant by gratitude, nor explore how the experience of gratitude influences the protégés' or network actors' work attitudes and behaviors. From a slightly different angle, a couple of studies have been conducted on the effect of receiving the expression of gratitude. Grant and Gino (2010) showed that receiving the expressions of gratitude is related to prosocial behaviors in the context of a call center (e.g., making more calls for potential contributors). Grant and Wrzesniewski (2010) also showed that when people anticipate the response of gratitude for their work from others, they tend to show higher work performance. The focus of these studies, however, is the expression of gratitude from the givers' perspective. What is missing is the experience of gratitude from the receivers' perspective—this is what my dissertation is focused on.

### **3.2. Gratitude as an object-specific, enduring affect: Attitudinal gratitude**

In addition to its insufficient implications in the work context, existing research on gratitude has also overlooked the object-specific, enduring aspects of gratitude. First, although gratitude can be experienced without an identified object for which one is grateful, it can also involve its specific objects or target. People can be grateful for their families, their jobs, and their friends. Some may have many objects of their gratitude and may be grateful for several of them. Either way, gratitude is an affect which often involves its *object* (e.g., Solomon, 1977; Teigen, 1997).

For example, considering both inside and outside of the work context, Moore (1996) investigated what U.S. citizens are most thankful for. They showed that the most common response was to mention family, followed by health, job/career, child/children, spouse, life, freedom, and friends. These are the *objects* of gratitude. Similarly, Adam Smith (1976) emphasized the proper object of gratitude, arguing that it is what deserves reward.

However, prior studies on gratitude in social psychology have focused mostly on the types of gratitude that do not involve specific objects. For example, the measure from Spence et al. (2013) included the items, "I feel grateful," and "I feel a warm sense of appreciation." The measure from McCullough et al. (2002) included, "I have so much in life to be thankful for," and "If I had to list everything that I felt grateful for, it would be a very long list." These items do not specify the source or object of gratitude: what they feel grateful for. In other words, the object of gratitude could be something or someone from both the inside and outside of the work context, such as family and friends. However, consistent with my earlier point, to better understand the role of gratitude specifically in work contexts, it is important to specify and limit the objects of gratitude to be within the boundary of work contexts, such as *gratitude for one's job*.

Moreover, although existing scholars have mostly focused on short-lived, state-like gratitude, gratitude can also exist over a longer period of time, not just as a one-time reaction to a particular event or situation. When employees are satisfied with their jobs (i.e., job satisfaction), like their coworkers (i.e., liking), or trust their supervisors (i.e., trust), what they feel toward their jobs, colleagues, and supervisors is not a short-lived, immediate affective state, but an enduring affect which has been conceptualized as work-related and interpersonal *attitudes* (Mayer, Davis, & Schoorman, 1995; Nicholson & Goh, 1983; Weiss, Nicholas, & Daus, 1999; Wojciszke, Abele, & Baryla, 2009). Similarly, from the above examples of what U.S. citizens are grateful for, they

may have indicated that they are grateful for their family and friends not because of an isolated situation they were responding to at the time of the survey, but because they have been grateful to them in general: having attitudinal grateful for them. In this vein, Simmel (1950: 45) viewed gratitude as "moral memory of mankind." He argued that gratitude can last, and thus help people to establish and maintain relationships with others in a durable manner.

Such enduring gratitude, or *attitudinal gratitude*, is thus different from an affective state of gratitude, since it is a general tendency toward the benefits for which people are grateful, rather than a one-time reaction driven by a particular event at the moment. It also differs from dispositional gratitude, since it is not solely dependent on the receivers' disposition and characteristics, but rather involves the objects of gratitude that dispositional gratitude does not involve. Yet existing studies have not fully captured such enduring, object-specific aspects of gratitude, as they have focused mostly on either the affective states (e.g., emotions and moods) or the disposition of gratitude (e.g., McCullough et al., 2002; McCullough et al., 2004). In my dissertation, I focus on a particular type of attitudinal gratitude: attitudinal gratitude toward one's job—" *job gratitude*". This concept is further explored in Chapter 4.

#### 4. OVERVIEW OF THE DISSERTATION

##### 4.1. Overview of the dissertation

My dissertation aims to fill these two main gaps in the studies of gratitude. To enhance the understanding of gratitude in work contexts, I examine work-related antecedents and consequences of gratitude, such as the links between gratitude and job design as well as work motivation. Furthermore, in order to shed light on the object-specific, enduring aspect of gratitude, I propose a new construct called *job gratitude* which refers to attitudinal gratitude specifically toward one's job. My dissertation captures both short-lived and enduring gratitude in



work contexts, as I propose the theoretical models of both state gratitude and job gratitude at work. Thus, *gratitude alone hereafter refers to both state gratitude and job gratitude as an umbrella construct*. Specifically, my dissertation consists of the following chapters.

In Chapter 3, I elaborate the conceptualization of gratitude. To do this, I draw upon affective structure theory, cognitive appraisal theory, and attribution theory (e.g., Lazarus & Folkman, 1984; Russell & Barrett, 1999; Weiner, 1985) to delineate affective and cognitive components that gratitude involves, particularly with examples from work contexts. Moreover, with the aim of improving our understanding of not only state gratitude, but also attitudinal gratitude, I separately conceptualize both *state gratitude* (i.e., grateful emotions or moods), and *job gratitude*, which refers to an attitudinal gratitude toward one's job in general. State gratitude and job gratitude share the definition of gratitude, but differ in their duration, formation, and consequences. I further conceptually explore the relevance and difference between state gratitude and job gratitude in detail in this chapter.

The purpose of Chapter 4 is to empirically develop and validate the measure of job gratitude through which the concept of job gratitude is operationalized. I follow recommended steps toward developing a valid measure for job gratitude (Hinkin, 1998) by conducting a series of surveys.

In Chapter 5, I explore the antecedents and consequences of *state gratitude* at work. Drawing upon Affective Events theory (Weiss & Cropanzano, 1996) and Affective Tendency Framework (Lerner & Keltner, 2000), I propose that everyday responsiveness-receiving events elicit state gratitude. I also suggest that state gratitude influences helping and in-role behaviors through the mechanism of a specific action tendency, *the desire to reciprocate benevolence*. Additionally, I further explore the moderating role of work-related contextual factors in the effects of state

gratitude. I propose that the impact of state gratitude on helping and in-role behaviors is strengthened when employees perceive less incentives and sanctions for both behaviors, operationalized by extrinsic job rewards and job dependency, respectively. Here, I focus on state gratitude in work contexts which may vary not only across individuals, but also within individuals depending on times and days (e.g., Rothbard & Wilk, 2011; Seo, Bartunek, & Barrett, 2010). Thus, I conducted a daily survey for three weeks, a two-wave survey before and after the daily survey, and an other-rated survey after the daily one. The daily survey captured the antecedents and mediators of state gratitude (i.e., daily responsiveness-receiving events at work and the desire to reciprocate benevolence). The consequences of state gratitude are examined by exploring the links between the average level of state gratitude for three weeks and the proposed, other-rated consequences (i.e., helping and in-role behaviors) in the final survey. This chapter may broaden the scope of affect research in the field of organizational behavior.

The study described in Chapter 6 was conducted to examine the antecedents and consequences of *job gratitude*, or attitudinal gratitude toward one's job. Drawing upon job design theory (Hackman & Oldham, 1975; Humphrey, Nahrgang, & Morgeson, 2007) and Affective Events Theory (Weiss & Cropanzano, 1996), I propose that dispositional gratitude (i.e., individual characteristics), job social support (i.e., job characteristic), and accumulated experiences of state gratitude (i.e., affective responses) influence employees' job gratitude level. Following this, I examine the various impacts of job gratitude on extra-role behaviors (i.e., voice, helping, and organization-directed citizenship behaviors) through the mechanism of *intended help*. The model of job gratitude was tested with a subset of the data described in Chapter 5, only including the initial and final surveys and other-rated survey. The proposed antecedents of job gratitude (i.e., job social support and dispositional gratitude) were measured in the initial survey,

job gratitude and its mediating variable (i.e., intended help) were measured in the final, and its consequences (i.e., extra-role behaviors) were measured in the other-rated, final survey. I examine the average level of state gratitude from a daily survey as an antecedent of job gratitude that is measured afterwards.

The theoretical contribution of studying the concept of gratitude, both in the form of state gratitude and job gratitude, resides in multiple theories in the field of organizational behavior, such as affect theory, motivation theory, and prosocial behavior literature. I discuss how my dissertation can advance these current theories more specifically in Chapter 7. Here I also discuss the limitations of the dissertation and suggestions for future study. Table 2 shows the overview of the dissertation, along with definitions of different forms of gratitude, and Figure 1 shows the integrated model of the dissertation.

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Insert Table 2 and Figure 1 about here  
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#### **4.2. Scope of the dissertation**

Following the recent advances in gratitude research as reviewed in this chapter, I view gratitude as a type of affect. However, in my dissertation, I limit the scope of my exploration to one's state gratitude (i.e., grateful emotions and moods) and job gratitude (i.e., a particular type of attitudinal gratitude). I do not examine dispositional gratitude, since I focus on organizational, contextual antecedents and consequences of gratitude in work contexts. Dispositional gratitude, as a trait or disposition, tends to exist in an unconditional and stable manner regardless of external situations and despite possible interactions between organizational contexts and dispositions (Roberts, 2006). State gratitude and job gratitude are more situational and context-

dependent, determined by employees' particular interactions and events at work, and, more specifically, by their feelings and perceptions about those interactions and events.

State gratitude and job gratitude also differ from the expression of gratitude. The expression of affect does not always involve the genuine feelings and experiences of the same affect, since people can regulate their expressions of affect (Brotheridge & Grandey, 2002; Morris & Feldman, 1996). The expression of gratitude, such as saying, "thank you" or giving a card or small token, does not always involve the actual experience of gratitude. The focus in my dissertation is on the genuine affective experience of recipients—employees who sincerely experience gratitude, rather than those who pretend to feel grateful, or those who receive the others' expression of gratitude.

## CHAPTER 3. GRATITUDE: CONCEPTUALIZATION

### 1. *GRATITUDE AND ITS DEFINING COMPONENTS*

In this chapter, I define gratitude as a particular type of affect that involves 1) experiencing positive core affect, and 2) the perception or belief of receiving a benefit from others. I propose that both components must be present in order to experience gratitude. In other words, if any of the components is missing in a certain experience, it would not be considered gratitude. I discuss this possibility more when explaining other constructs that are differentiated from gratitude. Later in this chapter, I suggest two different forms of gratitude: state gratitude and job gratitude. The two defining components are shared by both state gratitude and job gratitude. Hereafter, I employ the term “gratitude” as an umbrella term, which includes both state gratitude and job gratitude.

#### **1.1. Affective and cognitive defining components of gratitude**

*Gratitude is charged with positive core affect.* There has been little disagreement that gratitude involves affective experiences with some physiological and psychological arousal (cf., Emmons & McCullough, 2004). Certainly, gratitude has positive valence, similar to other positive affect, such as joy, hope, excitement, and pride. This positive valence, which gratitude shares with these other affects, can be considered *core affect*. Barrett (2006: 30) argued that core affect is the most basic building block of emotional life, characterized as "the constant stream of transient alterations in an organism's neurophysiological state." Core affect is momentary, universal, and objectless (Russell & Barrett, 1999).

More specifically, core affect is mapped by the two-dimensional bipolar structure (i.e., circumplex), which consists of two orthogonal axes: pleasant-unpleasant and activated-deactivated (Russell, 2003; Seo et al., 2004). The various core affects are combinations of these

two basic constituents in different degrees. In other words, core affects are arranged along the perimeter of the circumplex, defined by the two dimensions. In this way, similar core affects (e.g., jittery and nervous) represent similar mixtures of valence and activation and are located closely on the circle. The positive core affect that gratitude involves is located in the dimension of high pleasure and of moderate activation, similar to the core affect of being happy and contented (Reisenzein, 1994; Russell & Barrett, 1999).

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Insert Figure 2 about here  
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Positive core affect (feeling pleasant with a moderate level of activation), however, accounts for only a part of gratitude. As mentioned above, core affect is an affective feeling that does not necessarily involve its object and related cognitive experiences. As I have already shown, these are necessary factors in experiencing gratitude. For example, the emotion of pride (feeling good about oneself) differs from the core affect of happiness (feeling good and happy), because pride consists of both positive core affect *and* other cognitive, evaluative processes that are related to oneself in this case (e.g., proud *of oneself*). Similarly, gratitude may involve not only positive core affect, but also other cognitive processes. Below, I delineate unique cognitive processes involved in gratitude as the second defining component of gratitude.

***Gratitude involves a perception of receiving a benefit.*** The second defining component of gratitude is a series of cognitive processes: recognition, appraisal, and attribution.

First, one cannot be grateful unless they recognize a benefit, which involves noticing what is given and appraising it as beneficial to themselves. An individual can be grateful only when they first notice and thus are conscious of the object. Such objects may be, for example, the existence

of certain employee benefits or of a colleague's intentions and actions to help. For instance, office workers cannot be grateful for the work from janitors and cleaners if they are not first aware of the work (i.e., benefit).

Second, it is also essential that the individual appraise the recognized object as beneficial (or potentially beneficial) to him or herself (Lazarus & Folkman, 1984). A perception of benefit is a subjective evaluation, since it involves one's judgments about the object based on his or her own values, needs, expectations, goals, and identity-orientation. This subjectivity makes the perceived benefits of the same object vary across individuals (e.g., Flynn, 2005; Lazarus, 1991). For example, unusual perks for employees, such as subsidies for environment-related, social, or outdoor activities may elicit different degrees of gratitude from different people, based on their subjective appraisals. Similarly, some people may be grateful for colleagues' genuine interest in and caring for their personal life and family, considering those expressions as emotional support or benefit, whereas others may perceive such colleagues as interfering.

Third, recognizing a benefit itself cannot always make people grateful. The experience of gratitude necessarily involves a particular causal judgment: attributions of the cause of benefit. Attribution theories assume that people have an innate predisposition to make sense of why something happens, trying to make their own causal inference based on available information (Festinger, 1954; Heider, 1958). According to these theories, when people acknowledge and perceive a benefit, it would be natural for them to infer the cause of the benefits.

People are grateful only when they attribute the cause of benefit to external entities, not solely to themselves, or in other words, when they identify *others* as givers. Weiner et al. (1979) suggested that the locus of causality—whether the cause is internal or external to the actor—is a significant dimension of attribution; it affects different affective experiences, such as anger,

gratitude, guilt, pity, pride, and shame (Weiner, 1985). He argues that people are grateful only when they attribute the cause of positive outcomes (i.e., benefits) to the others (i.e., external locus). If people attribute the cause of positive outcomes to themselves, they are likely to be proud, not grateful. For example, top executives would be grateful for the help and caring from their secretaries if they attributed the cause of such benefits to the secretaries (i.e., external locus). However, if they attribute the same behaviors solely to their own management skills and charisma, which might lead the secretaries to act nicely, they are less likely to experience gratitude to the secretaries. Instead, they are more likely to be proud of themselves (i.e., internal locus). Thus, to feel grateful, the giver has to be identified as an external entity, not oneself. Taken together, gratitude is experienced when people recognize a benefit and attribute it not solely to them, but to an external entity: the perception of *receiving* a benefit *from others*.

A giver is not always identified as a particular entity, although people would still know that a benefit does come from the external entities, not from themselves. For example, when people are grateful for the stability of the job and the meaning of their work, they are not always aware of who provided them with such stability and meaning; a giver is not identified. This is different from gratitude that people experience when they receive a specific help or gift from their colleagues and supervisors, those who are identified as givers to whom they are grateful. Consistent with the former (without an identified giver), Lambert and his colleagues (2009b) explored gratitude resulting from an awareness and appreciation of anything valuable and meaningful to oneself, not necessarily from a newly given benefit from a particular giver. Spence (2010: 29) also defined gratitude as “as a pleasant feeling of appreciation and generosity in recognizing that one has received a benefit,” and measured it with items such as, “I feel a warm



sense of appreciation” and, “I have been treated with generosity” without addressing the presence of a specific giver.

On the other hand, many studies have explored gratitude toward identified givers in the context of inter-subjective exchange, close to the gratitude-as-social-experience approach in sociology (Simmel, 1950). In this vein, scholars have shown that such gratitude promotes feeling of connections toward the giver, and facilitates cooperative, responsive, and prosocial behaviors toward them (Algoe & Haidt, 2009; DeSteno, Bartlett, Baumann, Williams, & Dickens, 2010; Watkins, Scheer, Ovnicek, & Kolts, 2006). In either case, gratitude includes the recognition of a benefit and the external attribution of its cause: *the perception or belief of receiving a benefit from others*.

## 2. TWO FORMS OF GRATITUDE AT WORK: STATE GRATITUDE AND JOB GRATITUDE

Here I propose a new construct called *job gratitude* as an attitudinal form of gratitude toward one's job, in addition to two other existing forms of gratitude: dispositional and state gratitude. These different forms of gratitude share the definition of gratitude: *positive affect with a perception or belief of receiving a benefit from others*. Drawing from Affective Events Theory (AET [Weiss & Cropanzano, 1996]), I also delineate how job gratitude is different from, yet related to, state gratitude at work in particular.

### 2.1. The attitudinal form of gratitude: Job gratitude introduced.

As discussed in Chapter 2, existing studies of gratitude have mainly focused on the disposition of gratitude and the state of gratitude (e.g., McCullough et al., 2004). Dispositions and states have been conventionally considered as independent, dichotomous categories of constructs in organizational behavior. However, scholars have started to portray them along a continuum, largely determined by the relative degrees of stability in

measurement and openness to change and development (Avolio & Luthans, 2006; Luthans & Avolio, 2003; Luthans, Avolio, Avey, & Norman, 2007). For example, Luthans et al. (2007) argued that a theoretical construct can be positioned in the continuum of state, state-like, disposition-like, and disposition, instead of the dichotomy between state and disposition. Accordingly, state gratitude (i.e., grateful emotions and moods) is positioned at the left end of the spectrum, whereas dispositional gratitude is positioned at the right end. The form that may lie in the in-between, such as attitudinal gratitude, however, has not been fully explored.

Moreover, little research has been done on gratitude, particularly in work settings, as also discussed in Chapter 2. Studies of gratitude have explored gratitude in the general life domain, or in educational and clinical settings (e.g., Emmons & Crumpler, 2000; Froh, Yurkewicz, & Kashdan, 2009; McCullough et al., 2004). Gratitude in work contexts, particularly employees' experience of gratitude, has not been fully explored (cf., Cotton et al., 2011; Kram, 1983).

I propose that exploring the attitudinal form of gratitude, which is specifically toward one's job can fill these gaps in the gratitude literature. Attitudes in general refer to "a psychological *tendency* that is expressed by evaluating a particular *entity* with some degree of *favor or disfavor*" (Eagly & Chaiken, 1993:1). Although most academic attention has been devoted to dispositional and state gratitude, scholars have hinted at its attitudinal form, too. For example, Harned (1997: 175) argued that gratitude is "an attitude toward the giver, and an attitude toward the gift, a determination to use it well, to employ it imaginatively and inventively in accordance with the giver's intention." Similarly, Emmons and Crumpler

(2000:56) stated that “gratitude is an emotional attitude toward life that is a source of human strength in enhancing one's personal and relational well-being.”

The attitudinal form of gratitude toward one's job can exist when employees have enduring positive affect toward their jobs with an overall, long-term belief that they have received benefits in their jobs. Consistent with the definition of general attitudes, job gratitude involves its object-target or *entity*, which is one's job. It is also a *tendency* related to the job; it involves an overall long-term belief about the job that embraces the benefits received at work and potentially the givers who have provided the benefit at work. Last, job gratitude involves a *favor*, because it accompanies enduring positive affect toward the job. Therefore, I define *job gratitude* as *enduring positive affect toward one's job with an overall, long-term belief that one has received benefit(s) in his/her job in general*. In Chapter 4, I empirically develop and validate the measure of job gratitude.

I propose that job gratitude is a global or facet-free construct, which does not include more than one sub-dimension or facet within the construct (Ironson, Smith, Brannick, Gibson, & Paul, 1989). In other words, job gratitude is an employee's *overall* affect and belief about what they have received in their job in general, not specifically about any facet or individual element of the job. Other examples of global constructs include self-esteem (Brockner, 1988), perceived organizational support (Eisenberger, Huntington, Hutchison, & Sowa, 1986), and turnover intention (Kelloway, Gottlieb, & Barham, 1999). It is contrasted with multi-faceted or composite constructs, which cover multiple principal areas separately within a more general domain, such as organizational citizenship behaviors (i.e., altruism, sportsmanship, conscientiousness, civic virtue, and courtesy, Podsakoff, MacKenzie,

Moorman, & Fetter, 1990) and Job Descriptive Index (i.e., satisfaction with work, pay, promotions, supervision, and coworkers, Smith, Hulin, & Kendall, 1969).

Employees may be grateful for different facets of their jobs with varying degrees. For example, their degrees of gratitude may differ from the particular benefits and supports they have received and their particular peers and supervisors who provided such benefits. As a global construct, however, job gratitude embraces all facets, based on objective weight of importance, by capturing the respondents' general overall feelings and beliefs related to what they are grateful for about their job.

Such a global approach is known as more powerful and more widely used than the facet approach. The facet approach measures attitudes for different facets of one's job (e.g., coworkers, work, and supervision) and linearly adds them together (e.g., Minnesota Satisfaction Questionnaire, Weiss, Dawis, & England, 1967). Scholars have pointed out the limitations of the facet approach; for example, omitting (including) some areas that may be (un)important to a particular person or having a linear sum of facet subscales without considering their relative importance (Ironson et al., 1989; Scarpello & Campbell, 1983). Instead, scholars tend to favor global measures of job satisfaction (e.g., Job In General, Ironson et al., 1989; Weiss et al., 1999), and have shown their superiority in exploratory power (Ironson et al., 1989).

Accordingly, I propose job gratitude as a global construct, defined as enduring positive affect toward one's job with an overall, long-term belief that one has received benefits in their job. It is measured by leading the respondent to consciously and unconsciously combine his or her reactions to various aspects of the job for which he or she is grateful in a single integrated response. I discuss the measure of job gratitude in more detail in Chapter 4.

## **2.2. State gratitude versus job gratitude: The duration, formation, and consequences**

As already explained, my dissertation focuses on job gratitude and state gratitude, rather than dispositional gratitude. Despite possible interactions between organizational contexts and dispositions (Roberts, 2006), such interactions tend to take place slowly and gradually (Mowday & Sutton, 1993). For this reason, I excluded this possibility and focused only on state and attitudinal gratitude. AET provides the theoretical underpinnings for understanding the differences and links between job gratitude and state gratitude. This theory distinguishes affective states from work-related attitudes, although the former both influences and is influenced by the latter (Fisher, 2002; Weiss & Cropanzano, 1996). It posits that employees' affective states tend to fluctuate, elicited by certain events at work, whereas their work-related attitudes tend to be stable, influenced by more stable job features and employee dispositions. It is worth investigating affective states separately from work-related attitudes, as they have distinct antecedents and consequences in work contexts (Weiss & Cropanzano, 1996). In short, AET suggests different duration, formation, and consequences between job gratitude and state gratitude.

As discussed above, the main difference between attitudinal gratitude—job gratitude—and state gratitude is their duration. Job gratitude, as an attitude, is more enduring than state gratitude, which is a mood or emotion. As a psychological tendency, attitudes differ from emotions because attitudes are relatively enduring, stable tendencies, not immediate reactions (Eagly & Chaiken, 2007). Weiss and Cropanzano (1996) showed that job satisfaction is relatively stable on a day-to-day basis, since one's beliefs about job features do not usually change frequently. In this vein, Eagly and Chaiken (2007) argued that attitudes are an inner tendency that is different from a state, which implies temporariness, and also from a disposition (i.e., trait), which implies

greater permanence. Thus, state gratitude is a response to a benefit and a giver *at the moment*, whereas job gratitude is a particular *tendency* related to one's job in general, which lasts longer.

Second, job gratitude, similar to other attitudes, is formed not at a moment (or by a single event), but over the course of time and events. Unlike emotions, which are often caused by a one-time, immediate stimulus (e.g., receiving specific help from another) (Eagly & Chaiken, 2007; Fazio, Powell, & Williams, 1989), attitudes are based on the accumulated memories of judgments and feelings related to the attitude entity (Bassili & Brown, 2005). AET also suggests that work-related attitudes, such as job satisfaction, are determined mostly by overall beliefs about general, stable job features, which are usually shaped over the course of time in a job. Consequently, such attitudes fluctuate less over time and are more enduring than emotions (Weiss & Cropanzano, 1996). For example, an employee may experience state gratitude at the moment when her company announces a pay raise. Independently, she could also have attitudinal gratitude toward her job in general, as she may have multiple positive, grateful experiences and memories in her job from the past and the present, which have contributed to shaping such a grateful attitude.

Job gratitude is thus formed by the accumulated memories of benefits and givers that one has experienced over a long period of time, not just by an immediate recognition or feeling at a given moment. Consistent with AET, state gratitude is thus a type of emotion or affective response that can vary from day to day or from moment to moment, determined by particular situations and events. Job gratitude, however, is similar to job satisfaction—stable and enduring, based on beliefs that have been established over time.

Last, job gratitude may have more long-term, cognition-driven consequences than state gratitude. As Eagly and Chaiken (2007) viewed attitudes as a tendency rather than an affective

state (a response), they argue that attitudes influence more long-term behaviors than emotions do. For example, scholars focusing on interpersonal attitudes (e.g., liking, respect, or trust) have shown that such attitudes impact one's interpersonal and job behaviors in a more stable way than short-lived emotions do (e.g., Mayer et al., 1995; Wojciszke et al., 2009). Similarly, AET argues that work-related attitudes (e.g., job satisfaction) tend to influence more cognitive, thoughtful decisions and behaviors, such as turnover or retirement, whereas affective states (e.g., positive and negative emotions) tend to influence more spontaneous behaviors, such as lateness or absenteeism (Hanisch & Hulin, 1990). Weiss and Cropanzano (1996) called the former judgment-driven behaviors and the latter, affect-driven behaviors. Thus, job gratitude may influence more judgment- or cognition-driven behaviors, which tend to have more long-term effects than the behaviors derived from state gratitude. I explore the differences by suggesting separate theoretical models of state gratitude and job gratitude.

Therefore, following AET, I suggest two forms of gratitude that share the general definition of gratitude, but differ in terms of duration, formation, and consequences. *State gratitude*, as existing studies have discussed, is a situation-specific, momentary positive affective state (i.e., emotions or moods), with an immediate perception that one receives a benefit from others. It is short-lived from the time when a benefit is recognized and attributed to others. *Job gratitude*, however, involves enduring positive affect with an overall, long-term belief that one has received benefits in one's job in general.

Figure 3 summarizes the core arguments of AET and indicates how state gratitude and job gratitude can be mapped on the model. I further discuss the detailed antecedents and consequences of state gratitude and job gratitude in Chapters 5 and 6, respectively.

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Insert Figure 3 about here

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### 3. *GRATITUDE DEFINED*

With the aforementioned affective and cognitive components, I define gratitude as positive affect with a perception or belief of receiving a benefit from others. Having such defining components, gratitude exists in two different forms in the workplace: state gratitude and job gratitude. Specifically, state gratitude refers to momentary positive affective state (i.e., emotions or moods) with an immediate perception that one receives a benefit from others. Job gratitude, on the other hand, refers to enduring positive affect with an overall, long-term belief that one has received benefits in one's job in general.

### 4. *THE NOMOLOGICAL NET OF STATE GRATITUDE AND JOB GRATITUDE*

State and job gratitude may be considered to overlap more or less with other existing constructs, such as positive core affect, indebtedness, and job satisfaction. Below, I explore the similarities and differences between them in order to clarify and distinguish state gratitude and job gratitude from other constructs.

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Insert Table 3 about here

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#### **4.1. State gratitude is not appreciation and indebtedness**

*Appreciation.* Adler and Fagley (2005) defined appreciation as “acknowledging the value and meaning of something—an event, a person, a behavior, a target—and feeling a positive emotional connection to it”. Appreciation has much in common with state gratitude. Recognizing something positive is necessary to appreciate something, because appreciation is all about



noticing, acknowledging, and feeling pleasant about what people have at the moment (Adler & Fagley, 2005). Appreciation also involves certain cognitive, subjective judgments about the object too; employees appreciate others when their behaviors meet or exceed their subjective expectations related to their value and meaning systems. In other words, similar to gratitude, recognition and appraisal are key in appreciation.

However, appreciation does not necessarily involve the recognition of a benefit. People can appreciate someone whom they respect or admire, even if they do not directly benefit from the person. For example, people can appreciate a particular employee's sincere work attitude and performance even though they may have not benefited personally from her work. In other words, appreciation does not always involve the perception of *receiving* a benefit. Thus, although state gratitude and appreciation can coexist (e.g., when what people perceive as valuable and meaningful from the other is also beneficial for themselves), they are not always identical.

***Indebtedness.*** Indebtedness, which refers to “a state of obligation to repay another”, is also distinct from state gratitude (Greenberg, 1980). Similar to gratitude, indebtedness is experienced only when one is aware that they are recipients of a benefit from others. Unlike gratitude, however, indebtedness does not necessarily accompany positive core affect; employees are likely to be emotionally neutral or even experience negative affect (McCullough et al., 2002). Moreover, indebtedness also involves an external obligation or pressure to reciprocate, which state gratitude does not involve. People often feel obligated to repay something in order to directly return the benefits to the givers, and thus to balance out the giving between them. State gratitude, on the other hand, leads to the *internal* desire to reciprocate. In other words, reciprocation from state gratitude is volitional and autonomous, whereas that from indebtedness

is externally coerced to some degree. I further discuss the internal, autonomous desire to reciprocate from state gratitude in Chapter 5.

State gratitude and indebtedness also have different behavioral consequences. For example, Schaumberg and Flynn (2009) argued that people who experience indebtedness tend to care about the amount and form of reciprocation and feel less indebted as they reciprocate, whereas people who experience state gratitude would do so less or not at all. Similarly, Goei and Boster (2005) also showed that state gratitude leads to voluntary compliance, whereas the feeling of obligation resulting from indebtedness does not. State gratitude and indebtedness may not be likely to coexist due to its opposite affective valence.

#### **4.2. Job gratitude is not job satisfaction and perceived organizational support.**

***Job satisfaction.*** Job satisfaction is one of the most widely researched phenomena in the organizational behavior literature over decades (cf., Judge, Thoresen, Bono, & Patton, 2001). Although job satisfaction has been explored with slightly different definitions and measurements (e.g., Hackman & Oldham, 1975; Ironson et al., 1989; Quinn & Shepard, 1974; Smith et al., 1969; Weiss et al., 1967), studies have commonly addressed affective and cognitive components of job satisfaction (e.g., Brief, 1998; Cranny, Smith, & Stone, 1992). For example, Weiss (2002: 175) defined job satisfaction as "a positive (or negative) evaluative judgment one makes about one's job or job situation," and Cranny, Smith, and Stone (1992: 1) defined it as "an affective reaction to one's job, resulting from the incumbent's comparison of actual outcomes with those that are desired." Similarly, Brief (1998: 10) viewed job satisfaction as "an attitude toward one's job"

Job satisfaction is similar to job gratitude in that both reflect employees' overall affect and beliefs about their jobs in general. However, unlike job satisfaction, which involves *overall*

*evaluative*, positive or negative, judgments about the job (Weiss, 2002), job gratitude involves somewhat more specific judgments than job satisfaction, centered around received benefits in the job. In other words, job satisfaction refers to overall evaluative judgments about the job, whereas job gratitude refers to overall beliefs about what and how one has benefitted from the job.

Therefore, although both job satisfaction and job gratitude both involve positive affect and some cognitive judgments related to the job in general, they differ from each other since they involve different cognitive beliefs.

***Perceived organizational support.*** Perceived organizational support refers to “employees' general belief that their work organization values their contributions and cares about their well-being (Rhoades & Eisenberger, 2002: 698).” Similar to job gratitude, perceived organizational support always involves the perceptions or beliefs of receiving certain benefits. Perceived organizational support also often accompanies to positive affect (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001), although this is not always the case. Also, unlike job gratitude or job satisfaction, which capture the overall affect and beliefs related to the *job* in general, perceived organizational support indicates employee belief about the *organization*. Employees may have a high level of job gratitude without necessarily perceiving organizational support as high. For example, an employee may believe they have received many benefits from other sources, such as their colleagues and supervisors. Thus, job gratitude is different from perceived organizational support.

## CHAPTER 4. DEVELOPMENT AND VALIDATION OF THE JOB GRATITUDE

### MEASURE: A MEASURE DEVELOPMENT STUDY

#### *1. INTRODUCTION*

The purpose of this study is to develop and validate the new measure of job gratitude—attitudinal gratitude toward one's job—as a distinct construct, based on the theorizing in previous chapters. To do so, I followed recommended steps toward developing a psychometrically valid measure (Hinkin, 1998). The overview of data collection and analyses is presented in Table 4.

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Insert Table 4 about here

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#### *2. PRELIMINARY STUDY: DEVELOPMENT OF THE JOB GRATITUDE MEASURE*

##### **2.1. Item generation**

As an initial step, I created items to assess the proposed construct of job gratitude. I first generated an initial set of items following in-depth interviews with 35 full-time employees. The interviews focused on understanding employees' general experiences of gratitude in their work contexts. Interviewees were recruited in two ways: 1) by snowball sampling and 2) through the Boston College Alumni Association. Interviews were conducted online, by phone, and in person, and they lasted from 25 to 56 minutes.

The interviewees were made up of 23 women and 12 men. Nine were in managerial or leadership positions, and the remaining interviewees held non-managerial positions. The average age of the interviewees was 46. Regarding religious affiliation, 18 identified as Christians, 11 claimed to not have any religion, and the remaining 6 were unknown. Twenty participants

worked in for-profit organizations and 12 worked in not-for-profit organizations (3 not categorized). All interviewees were employed by different organizations, as I expected that the variations in organization would provide broader insight on grateful experiences at work. I evaluated the interview data and devised items that indicate the interviewees' overall grateful affect and belief about their jobs.

Furthermore, I supplemented these items by adapting existing research that fits the defining components of job gratitude. Recent studies by social psychologists introduced measures of gratitude in the general life domain (e.g., GQ-6 by McCullough et al., 2002 and GRAT by Watkins et al., 2006). I modified and included some of these items in my item pool. In generating the potential items, I followed three criteria: each item 1) is positively worded, 2) does not involve more than one meaning that may diverge, and 3) uses lay terminology to describe the construct (e.g., Converse & Presser, 1986; Cordery & Sevastos, 1993; Gordon & Holden, 1998). In total, I created a pool of 13 candidate items. Table 5 displays the generated items.

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Insert Table 5 about here  
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## **2.2. Content validation**

Following Lawshe (1975) and Bernerth et al. (2007), I examined the content validity of these items in relation to the items of dispositional gratitude, job satisfaction, and perceived organizational support. Dispositional gratitude, as one of few existing constructs related to gratitude, differs from job gratitude since it indicates a disposition rather than an attitude. As discussed in Chapter 2, affective dispositions are more stable and predisposed than attitudes,

though they also influence job-related attitudes (Judge & Kammeyer-Mueller, 2012; Weiss & Cropanzano, 1996).

Additionally, as discussed in Chapter 3, job gratitude (i.e., attitudinal gratitude toward one's job) is distinct from job satisfaction and perceived organizational support, two of the most widely used work-related attitudes. Although job satisfaction is, like job gratitude, an overall judgment or belief about one's job, it does not involve the belief of receiving a benefit, as job gratitude does. Similarly, while perceived organizational support is based on the belief of receiving benefits or supports, it is directed only to one's organization, not to the job. Thus I examined the content validity of job gratitude in relation to these three related measures.

Twenty three doctoral students and faculty members in the field of organizational behavior assessed the content validity of the three measures. Each participant received an email with an instruction and a content validity questionnaire. The participants were asked to classify each item (a total of 25 items) from job gratitude, dispositional gratitude (McCullough et al., 2002), job satisfaction (Cammann, Fichman, Jenkins, & Klesh, 1983), and perceived organizational support (Eisenberger et al., 1986) into only one of four construct definitions. There was also an option to label items as unidentifiable. In addition to the classification process, the same 23 participants rated the extent to which each item matched the given definition (1 = barely representative; 2 = slightly representative; 3 = moderately representative; 4 = strongly representative). Based on the ratings from the participants, I calculated a content validity ratio (CVR) for each item of job gratitude, calculated by the following formula:

$$CVR = \frac{(n_e - \frac{N}{2})}{\frac{N}{2}}$$

Here,  $n_e$  represents the number of participants who correctly identified the newly developed job gratitude items as assessing the job gratitude criterion space (not the job satisfaction or perceived organizational support spaces) and also rated it as 3 or 4.  $N$  is the total number of participants. A CVR of 1.0 indicates the item was perfectly content valid, whereas a CVR of -1.0 indicates the item was perfectly content invalid. Lawshe (1975) suggested with 20 to 30 participants, the minimum value of acceptable CVR is .42 and .33, respectively. I dropped five items which showed their CVR less than .42. Following this, I also dropped one additional item that showed less than 75% of a correct item classification, as recommended by Hinkin (1998) as a minimum required to provide evidence of content adequacy. As a result, seven items remained. Table 5 above also shows the correct item classification and CVR of the generated items.

### *3. MAIN STUDY: VALIDATION OF THE JOB GRATITUDE MEASURE*

#### **3.1. Procedure**

In order to check the dimensionality and construct validity of the job gratitude measure, I conducted a two-wave survey at Time 1 and Time 2, with a three-week time lag. I collected data using Qualtrics, a third-party online survey administration company. Qualtrics sent approximately 4000 solicitations to their nationwide panel of one million adults who had previously expressed an interest in participating in Qualtrics research projects. Solicitations were sent only to full-time employees in the U.S. over 18 years old. Their panel was compensated with “survey cash” credits that could be converted into monetary compensation after they participated in a certain number of research studies. From the initial pool of participants, 594 full-time employees completed the Time 1 online survey, at their time convenience, for a 14.4% response rate. I invited these 594 participants to complete the Time 2 survey, and 217 responded. Thus, the effective response rate for the Time 2 survey was 36.5% (i.e., 217/594).

Given the relatively large number of responses at Time 1, I split the sample into two subsamples. Using the 377 participants who only responded to the Time 1 survey, I checked the dimensionality of job gratitude. Using the 217 participants with matched Time 1 and Time 2 data, I examined the construct validity of job gratitude. More detailed information about each sample set is below.

### **3.2. Dimensionality check**

Among 377 participants, 11.1% of the respondents were between 18 and 25 years old, and 30.0% were 26-35 years old, 21.8% were 36-45 years old, 21.0% were 46-55 years old, and 16.2% were over 56 years old. Male participants comprised 58.9%, 75.3% were White/Caucasian, and 34.2% had Bachelor's degree. Also, 35.8% had 1 to 5 years of organizational tenure, and 25.2% had 6 to 10 years of tenure. Participants worked in more than 20 industries, though 11.4% worked in education and 10.9% worked in the medical, dental, or healthcare industry. Since a sample size of 150 observations is considered sufficient for obtaining an accurate solution in an exploratory factor analysis (EFA) (Guadagnoli & Velicer, 1988), the data collected here were large enough to examine the dimensionality of the job gratitude measure.

I conceptually proposed job gratitude as a uni-dimensional construct (Cortina, 1993). The seven items remaining from content validation showed satisfactory internal consistency reliability (Cronbach's alpha = .921). There was no item that had significantly lower correlation with other items than the average (Clark & Watson, 1995; Hinkin, 1998). Furthermore, an EFA using the Varimax rotation showed that principal axis factor analysis yielded a single-factor solution. Every item had a factor loading of higher than .4, so no item was dropped, following conventional application of EFA (Ford, MacCallum, & Tait, 1986; Hinkin, 1998). The amount of variance that the one-factor solution for the job gratitude items explained was 68.73%, which is



higher than Hinkin's (1998) recommended minimum 60%. Moreover, as shown in Table 5, all of the seven items showed a moderate level of variance, skewness, and kurtosis.

### 3.3. Construct validation

I examined construct validity of the job gratitude measure including convergent, discriminant, and predictive validity by analyzing the 217 matched Time 1 – Time 2 responses. An important requirement to test for the empirical utility of a new measure is to compare it with other existing measures that potentially capture the same underlying construct. In other words, it is necessary to show the convergent and discriminant validity of a newly developed measure. In Chapter 3, I conceptually distinguished job gratitude from other existing constructs. For example, job gratitude, as a kind of attitude, is different from *dispositional* and *state gratitude*, particularly in terms of its duration. Likewise, job gratitude is distinct from other existing attitudinal constructs, such as *job satisfaction* and *perceived organizational support*.

Another important step for assessing the validity of a new measure involves examining its external, predictive, or consequential validity to ensure that the measure can explain processes and outcomes of relevance to organizational research (e.g., Cronbach & Meehl, 1955; John & Benet-Martinez, 2000). The purpose of this study is to provide an initial test of a model linking job gratitude to employees' work-related attitudes and behaviors: in-role behaviors, pro-relationship, turnover intention, and organizational citizenship behaviors.

**Measure** All items in the measures were accessed using a 7-point Likert-type scale. Cronbach's alpha, mean, and standard deviation of each variable is shown in Table 6.

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Insert Table 6 about here  
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First, at Time 1, to assess the discriminant validity of job gratitude with dispositional gratitude and state gratitude, I used the seven items of job gratitude developed earlier, GQ-6 for dispositional gratitude developed by McCullough et al. (2002), and three adjectives ("grateful," "thankful," and "appreciative") for state gratitude (e.g., McCullough et al., 2004; Tsang, 2006), consistent with earlier studies on state gratitude in social psychology. Additionally, I used five affect-related adjectives ("excited," "joyful," "enthusiastic," "calm," and "serene"), which represent the circumplex structure of core affect in order to examine positive affective state (Barrett & Russell, 1998). These measures have been thoroughly validated and widely used, especially in the emotion literature. State indebtedness was measured by using "indebted," "obligated," "owed," and "beholden." The first two adjectives have been used in many studies in social psychology (e.g., Greenberg, 1980; Tsang, 2006), but to ensure the reliability of the measure, I added "owed" and "beholden," making it a four-item measure (Hinkin, 1998).

To examine the discriminant validity of job gratitude with other attitudinal constructs, I used the job satisfaction measure by Cammann et al. (1983) and perceived organizational support measure by Eisenberger (1986). The reliability and validity of these measures have similarly been well-established in existing studies in social psychology and organizational behavior.

At Time 2, to examine the variability of dispositional, state, and job gratitude over time, I used the same three measures as those used at Time 1. Here, I also included social desirability developed by Strahan and Gerbasi (1972). To examine the predictive validity of job gratitude, I then used the measures of organizational citizenship behaviors developed by Podsakoff et al. (1990), in-role behaviors by Williams and Anderson (1991), turnover intention by Kelloway et al. (1999), and pro-relationship behaviors by Ashford and Black (1996), all of which have been widely used in prior studies in organizational behavior.

***Samples*** Among 217 participants who answered both surveys, three responses contained missing data, so they were excluded in following analyses. Listwise deletion was used because the number of cases with missing data is small, and data appeared to be missing at random (Allison, 2001). Thus, a total 214 responses were analyzed. 5.6% of respondents were 18-25 years old, 16.0% were 26-35 years old, 23.9% were 36-45 years old, 23.9% were 46-55 years old, and 30.5% were 56-65 years old. Male participants comprised 47.4%, 77.5% were White/Caucasian, and 32.4% had Bachelor's degree. Regarding job backgrounds, 29.6% had 1 to 5 years of organizational tenure, and 31.0% had 6 to 10 years of the tenure. They worked in more than 20 industries, though 14.1% worked in education and 10.3% worked in the medical, dental, or healthcare industry. The sample size here is enough to conduct confirmatory factor analysis (CFA), since it is above 200 (Guadagnoli & Velicer, 1988).

***Analyses and results*** Data were analyzed with multiple methods, including a t-test, an exploratory and confirmatory factor analysis, and hierarchical linear regressions. First, I checked the reliability of the job gratitude measure as a global construct by computing the total correlation (i.e., Cronbach's alpha). Cronbach's alpha of the measure is .928 at Time 1 and .922 at Time 2, both of which are higher than the recommended .7. For the purpose of replication, I also conducted an exploratory factor analysis, and it showed the single dimensionality of job gratitude, explaining 70.93% (T1) and 69.48% (T2) of variance, consistent with the result from the initial 377 participants above.

Next, I checked the convergent validity of job gratitude by examining the extent to which it correlates with other conceptually similar constructs (Hinkin, 1998). While the constructs may be similar, the empirical associations should not be so high as to suggest empirical redundancy—preferably below .71 (MacKenzie, Podsakoff, & Podsakoff, 2011). I examined the correlations

between job gratitude and existing constructs, including dispositional and state gratitude, social desirability, positive affective state, state indebtedness, job satisfaction, and perceived organizational support. Table 6 shows the correlations between variables. Job gratitude showed acceptable level of correlations (from .393 to .677) with these variables, excepting job satisfaction ( $r = .720$  between Time 1 job gratitude and Time 2 job satisfaction;  $r = .753$  between the Time 2 variables). However, considering the possible impact of a common method bias between those measured at the same time, and relatively lower correlations between Time 1 job gratitude and Time 2 job satisfaction and vice versa ( $r = .590$  and  $.618$ ), I concluded that job gratitude has convergent validity in the field of organizational behavior.

This result also helps to reveal the differences among dispositional, state, and job gratitude. To do this, I examined the distinctiveness of job gratitude from dispositional and state gratitude by getting test-retest reliability between Time 1 and Time 2. Test-retest reliability of dispositional gratitude, job gratitude, and state gratitude was .725, .718, and .561, respectively. As expected, the correlation coefficient for job gratitude is lower than that for dispositional gratitude and higher than that for state gratitude, so that job gratitude was more variable than dispositional gratitude and less variable than state gratitude. The test-retest correlation coefficient for job gratitude was only slightly smaller than that of dispositional gratitude, possibly because there was only three-week gap between the Time 1 and Time 2 survey, which was not enough time for job gratitude to dramatically change. However, the general results were consistent with how they are theorized: the correlations were high in the order of dispositional, job, and state gratitude.

Considering all the variables of interest, I also used confirmatory factor analysis and chi-square difference tests to compare the fit of a correlated seven-factor measurement model (job

gratitude, dispositional gratitude, state gratitude, positive affective state, state indebtedness, social desirability, and job satisfaction) against the fit of alternative models that constrained a correlation between two constructs to 1.0 (Gerbing & Anderson, 1988). Possible alternative models are the ones having job gratitude fully correlated with 1) dispositional gratitude, 2) state gratitude, 3) social desirability, 4) positive affective state, 5) state indebtedness, or 6) job satisfaction. Consistent with my theorizing, the model with job gratitude as a separate factor showed a significantly better fit than alternative models, as presented in Table 7.

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Insert Table 7 about here  
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Last, using hierarchical regression, I tested if the job gratitude measure accounted for unique variance (over and above dispositional gratitude and state gratitude) in each of the outcomes examined: in-role behaviors, pro-relationship behaviors, turnover intention, and organizational citizenship behaviors. Here, I divided OCB into OCBO (OCB directed to the organization) and helping behaviors (OCB directed to individuals). OCBO consists of conscientiousness, sportsmanship, and civic virtue, whereas helping behaviors consist of courtesy and altruism (Williams & Anderson, 1991).

As seen in Table 8, after controlling respondents' age, gender, rank, tenure, Big Five personalities, and social desirability, which are known to correlate with people's experience of gratitude in general (McCullough et al., 2004), job gratitude was significantly associated with pro-relationship behaviors ( $\beta=.208$ ,  $p<.05$ ), turnover intention ( $\beta=-.427$ ,  $p<.001$ ), and helping behaviors ( $\beta=.166$ ,  $p<.05$ ).

I also calculated Cohen's  $f^2$  to show the size effect of job gratitude above and beyond other predictors.

$$f^2 = \frac{R_{AB}^2 - R_A^2}{1 - R_{AB}^2}$$

Here  $R_A^2$  represents variance accounted for in the population by variable set  $A$ , and  $R_{AB}^2$  represents variance accounted for in the population by variable set  $A$  and  $B$  together. Cohen (1988) suggested  $f^2$  values of .02, .15, and .35 present small, medium, and large effect sizes. Job gratitude showed small effect size in predicting pro-relationship behaviors, turnover intention, and helping behaviors.

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Insert Table 8 about here  
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#### 4. *DISCUSSION*

The results provide evidence that the job gratitude measure with its seven items has satisfactory content and construct validity. The analysis confirmed a single dimensionality of the measure, and showed satisfactory convergent, discriminant, and predictive validity. Specifically, job gratitude shows moderate levels of correlation with existing measures in organization studies, such as job satisfaction and perceived organizational support. It also displays a significant correlation with pro-relationship behaviors, turnover intention, and helping behaviors after controlling the effects of dispositional and state gratitude.

As researchers begin to call attention to the importance of positive deviance in organizational contexts (e.g., Spreitzer & Sonenshein, 2004; Vadera et al., 2013), as opposed to negative deviance that existing studies have focused on (e.g., Robinson & Bennett, 1995), a valid measure

to assess employees' attitudes that may result from positively deviant experiences at work is needed. A measure of job gratitude contributes to filling this gap, as it captures employees' grateful attitudes toward their job, based on the belief that they have received benefits in their jobs. Job gratitude is thus differentiated from job satisfaction, which represents employees' satisfactory, positive attitudes toward their jobs, without consideration of perceived benefits.

However, further evidence is needed to provide support specifically for the predictive validity of the measure, since the surveys described in this chapter only include self-reported measures, so that the results are likely affected by common method biases (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). In Chapter 6, I further examine the predictive validity of job gratitude, using multi-source data, as I developed and tested a theoretical model of job gratitude.

# CHAPTER 5. DEVELOPMENT AND TEST OF A THEORETICAL MODEL OF STATE GRATITUDE

## 1. INTRODUCTION

In this chapter, I explore the antecedents and consequences of *state gratitude*. First, drawing upon Affective Events Theory (AET, Weiss & Cropanzano, 1996), I propose that everyday responsiveness-receiving events at work elicit state gratitude. Second, focusing on the consequence behaviors of state gratitude and drawing upon Affective Tendency Framework (ATF, Lerner & Keltner, 2000), I suggest the affective motivational mechanism (the desire to reciprocate benevolence) through which state gratitude is associated with individual work behaviors: helping and in-role behaviors. I further show the moderating effects of extrinsic job rewards and job dependency on the affective processes.

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Insert Figure 4 about here  
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## 2. A THEORETICAL MODEL OF STATE GRATITUDE

### 2.1. Antecedents of state gratitude

According to AET, work events play a significant role in employees' affective experiences, leading to affective reactions that, in turn, influence both work attitudes and affect-driven behaviors such as performance (Weiss & Cropanzano, 1996). Rothbard et al. (2011), for example, considered customers' positive affective display as a significant work-related event, and Scott and Barnes (2011) examined the participants' everyday surface and deep acting as a work-related event. Similarly, employees may experience different degrees of state gratitude at different times,



depending on the interactions and events occurring at certain time points or periods. Accordingly, I propose that employees are more likely to experience state gratitude when they encounter an event in which they perceive themselves as receiving *responsiveness* from others at work, such as their supervisors, peers, department, or organization.

Responsiveness refers to the extent to which people are cognizant of, sensitive to, and behaviorally supportive of others (Reis, Clark, & Holmes, 2004). Reis and Patrick (1996) argued that the key characteristics of responsiveness are behaviors that communicate understanding, validation, and caring. For example, giving timely advice and assistance when the recipient is in particular need, or giving a CD that is the recipient's favorite band as a birthday gift are examples of responsive behaviors (Algoe et al., 2008). From the perspective of those who receive responsiveness, it is associated with feelings of being understood, valued, and cared for by another individual. This also elicits positive core affect as a result of satisfying one of the basic psychological needs (Reis, Sheldon, Gable, Roscoe, & Ryan, 2000; Ryan & Frederick, 1997).

Receiving responsiveness leads to a sense of relatedness, which simultaneously involves both the perception of receiving a benefit (support or care) and positive core affect, which constitutes the defining components of state gratitude. In other words, receiving responsiveness elicits state gratitude. In this vein, Algoe et al. (2008) showed that people are grateful when givers (i.e., other organizational members) understand, approve, and care about them. Kashdan et al. (2009) also showed the significant correlation between a sense of relatedness and gratitude.

Employees can experience a sense of relatedness not only to a single human entity, but also to collectives, non-humans, and unidentified entities (e.g., Algoe et al., 2008; Emmons, 2007). For example, employees may feel connected to and cared by their teams, organizations, and anonymous others. Thus, in the event when employees receive responsive behaviors from their

department and organization or anonymously (e.g., public recognition, compassionate leave, or anonymous favor), they may also experience state gratitude for the responsiveness they received.

Thus, I hypothesize,

*Hypothesis 1. An everyday responsiveness-receiving event is positively associated with an employee's experience of state gratitude.*

## **2.2. Consequences of state gratitude**

In this section, I examine how employees' state gratitude experienced at work influences their work-related behaviors. To do this, I depict employees' affective motivational state as a central mechanism through which gratitude is related to two important work-related behaviors: helping and in-role behaviors. In particular, drawing upon the ATF I suggest that state gratitude, as a particular type of positive emotions, provides a unique motivational state, *a desire to reciprocate benevolence* (Hatfield & Sprecher, 1983), which then promotes the aforementioned behaviors. Additionally, I focus on two elements: 1) *extrinsic job rewards*, the extent to which a job provides tangible, external reinforcers that provide feelings of comfort to the employee (cf., Hackman & Oldham, 1976; Stinglhamber & Vandenberghe, 2004), and 2) *job dependency*, the extent to which a job is affected by work from other jobs (e.g., Mainiero, 1986; Morgeson & Humphrey), both as a deactivator of the affective motivational state. In other words, following the ATF, I posit the overriding or deactivating effects of cognitive, extrinsic motivators, and propose that the motivational impact of state gratitude may be stronger when there are weaker enduring motivational cues such as extrinsic rewards (i.e., extrinsic job rewards) and sanctions (i.e., job dependency).

***State gratitude and the desire to reciprocate benevolence.*** The motivational, behavioral impact of state gratitude has long been addressed in various disciplines, particularly with its

potential to facilitate multiple behaviors related to reciprocity (e.g., Emmons & McCullough, 2004; Fredrickson, 2004). The action tendency of reciprocity simply suggests that people want to help those who have helped them and, similarly, not cause harm to those who have helped them. This is often understood as a general propensity of human beings (Gouldner, 1960; Homans, 1961). However, the motivation to reciprocate that state gratitude involves is different from the types of reciprocity that most studies in management research have explored. Existing studies maintain a narrow view on reciprocity, mostly based on instrumentality and obligation (cf., Baker & Bulkley, 2014; Cropanzano & Mitchell, 2005), considering reciprocation as coming from an external pressure to reduce inequity and indebtedness, or, alternately, from a strategy to maximize self-interest (e.g., Axelrod, 1984; Greenberg, 1980; Komorita & Parks, 1999).

The motivation that state gratitude involves, however, is less conscious and obligated. In particular, ATF and the functional theories of emotions propose that some emotions are naturally associated with specific motivations. For example, anger is linked with the urge to attack, and disgust with the urge to expel (Frijda, 1987; Ortony & Turner, 1990). They are affective and biological responses that have evolved as a function of adaptation (Darwin, 1952; Hertenstein, Keltner, App, Bulleit, & Jaskolka, 2006; Oatley & Jenkins, 1992). Similarly, as a particular type of positive emotion, state gratitude involves an urge or affective motivation to reciprocate benevolence, thus named *the desire to reciprocate benevolence*. Both evolutionary biology literature and emotion research view gratitude as an evolutionary adaptation that regulates peoples' responses to altruistic acts (Nowak & Roch, 2007; Trivers, 1971). Scholars have shown that state gratitude is a psychological, biological mechanism underlying reciprocal interactions in both human and nonhuman primates (Bonnie & de Waal, 2004). In other words, with and

without being conscious of a sense of obligation, employees experiencing state gratitude may have the desire to reciprocate benevolence.

It is also worth noting that the desire to reciprocate benevolence is not a self-interested motivation, such as enhancing one's reputation, but an other-oriented and altruistic one. For example, state gratitude motivates people to return a benefit even when there is no external force demanding it (Bartlett & DeSteno, 2006; Watkins et al., 2006). The desire to reciprocate benevolence is to benefit others, not to maximize one's self-interest or to boost one's self-esteem. Consistently, scholars have viewed state gratitude as an other-focused affect (Algoe & Haidt, 2009) that involves ego-transcendence in its experience (Algoe & Stanton, 2012). Thus, I hypothesize that employees experiencing state gratitude may have a greater desire to reciprocate benevolence, an affective, other-oriented motivation at work.

*Hypothesis 2. The experience of state gratitude is positively associated with the desire to reciprocate benevolence at work.*

***State gratitude and work-related behaviors.*** Scholars of ATF, however, do not suggest that everyone acts out certain motivations in identical ways when experiencing particular emotions. Instead, people have certain sets or directions of behaviors that they are more encouraged to engage in (Fredrickson, 2004). In particular, positive emotions, rather than negative ones, tend to involve motivations or action tendencies that are less specific and more flexible, as positive emotions tend to broaden individuals' scopes of cognition and action (Fredrickson, 1998).

Accordingly, I propose that the desire to reciprocate benevolence at work, which state gratitude accompanies, is realized through a broadened scope of *action repertoire of reciprocation*. In other words, with the same direction of motivation, which is to reciprocate

others' benevolence, employees experiencing state gratitude may be creative and flexible in terms of implementing this motivation. To be more precise, I propose in the following that the desire to reciprocate benevolence at work not only leads to *direct reciprocation* by immediately returning the received benefit to the giver(s), but also that it may be broadened further into *indirect* and *alternative reciprocation*, as it leads to helping and in-role behaviors, respectively. Thus, state gratitude and the desire to reciprocate benevolence serve as an affective, other-oriented motivation for these behaviors.

First, the desire to reciprocate benevolence at work is likely to lead to *helping behaviors*. Helping behaviors are actions intended to help or benefit another individual or group of individuals (Batson, 1998). Several studies have shown that people experiencing state gratitude tend to behave prosocially toward givers in ways that directly reciprocates the received benefits (e.g., McCullough et al., 2001; Peterson & Stewart, 1996). Bartlett and DeSteno (2006) confirmed a positive relationship between state gratitude and helping behaviors toward the givers even when helping behaviors are costly. Similarly, Tsang (2006) obtained the same results after controlling for the effect of other positive emotions.

More importantly, employees experiencing state gratitude may engage in helping behaviors not only toward givers, but also toward related and even unrelated others at work who did not provide the benefit for which they are presently grateful (Bartlett & DeSteno, 2006; McCullough, Kimeldorf, & Cohen, 2008). This takes place through the mechanism of *indirect reciprocation* or *paying-it-forward* (A benefits B, and B pays it forward to C, rather than back to A), as reflected in a simple maxim: "help anyone, if helped by someone" (Gray, Ward, & Norton, 2014: 247; Rankin & Taborsky, 2009). In this vein, scholars who take a functional view of emotions and evolutionary biology view state gratitude as key to the evolution of cooperative or altruistic

behaviors (e.g., Lévi-Strauss, 1969; Nowak & Sigmund, 2005; Takahashi, 2000). Specifically, Nowak and Roch (2007) called it “upstream reciprocity” when paying-it-forward takes to the population level, and they concluded from their simulation that gratitude-motivated upstream reciprocity enhances the fitness of the population, as it makes altruism work more efficiently within the system. Therefore, consistent with ATF and a functional approach to gratitude, I propose that state gratitude and its motivation, the desire to reciprocate benevolence, serve as a motivator by facilitating employees’ helping behaviors both toward the givers and third parties. Thus I hypothesize:

*Hypothesis 3a: The desire to reciprocate benevolence is positively associated with helping behaviors at work.*

*Hypothesis 3b: The desire to reciprocate benevolence mediates the relationship between state gratitude and helping behaviors, such that state gratitude is positively and indirectly associated with helping behaviors at work.*

Second, I propose the most unique function of state gratitude, particularly in work contexts: its impact on work motivation. Despite ample research on multiple benefits or functions of state gratitude in social psychology, this research has focused primarily on its proximal effects, especially on helping and interpersonal behaviors, without fully considering the contexts in which state gratitude is experienced. Organizations, however, provide a unique context where people are often connected by their assigned work or tasks, rather than through friendship or kinship. In such contexts, I propose that the desire to reciprocate accompanying state gratitude can be realized in an alternative, distal way; putting additional effort into one's own work in order to benefit or help other people at work distantly.

Studies based on self-determination theory and other work motivation theories have shown that employees are sustainably motivated by their work not only when work activities are inherently enjoyable and fun, but also when they fully internalize the values, goals, or meaning of the work (e.g., Locke & Latham, 1990; Ryan & Deci, 2000; Sheldon & Elliot, 1998). State gratitude may facilitate such internalization, as employees experiencing state gratitude are likely to realize the value of their work as a means of *alternative reciprocation*. In other words, when people experience state gratitude toward those with whom they are connected by work, they are more likely to work harder (i.e., perform their in-role behaviors better) as they perceive their work as a way to reciprocate the received benevolence (cf. Morrison, 1994). For example, when an engineer is feeling grateful to her management team for the opportunities to get advanced training and education for free, she is likely to be more motivated to do her work well. This motivation is present because it is through her work that she can reciprocate the benefits she has received, not only to the management team, but also to other workers, customers, and, perhaps, the broader society. Aligning with this, Grant and Berry (Grant, 2008; Grant & Berry, 2011) examined work motivation that comes from the internalized value of helping others, and showed that such work motivation is positively associated with work persistence, performance, and productivity. Thus, I hypothesize,

*Hypothesis 4a: The desire to reciprocate benevolence is positively associated with in-role behaviors at work.*

*Hypothesis 4b: The desire to reciprocate benevolence mediates the relationship between state gratitude and in-role behaviors, such that state gratitude is positively and indirectly associated with in-role behaviors at work.*

*Moderating effects of extrinsic job rewards and job dependency.* Here, I am proposing the boundary conditions or factors that moderate the impact of state gratitude and the desire to reciprocate benevolence. ATF argues that emotions function to motivate corresponding actions more strongly when there is a lack of cognitive input or reasons to choose an appropriate course of action (Johnson-Laird & Oatley, 1992; Lerner & Keltner, 2000). In other words, the strength of affective motivation or action tendency that a particular emotion provides is higher when there are no or less salient alternative motivational cues available in the environment.

Organizations use various motivational cues or inputs (e.g., rewards, expectations, norms, and punishment), which possibly direct employees' helping and in-role behaviors. For example, employees help others at work not only because they feel the urge to do so, but also because they perceive it as a way to gain a benefit, such as a positive reputation leading to a promotion (e.g., Baker & Bulkley, 2014; George, 1991). According to ATF, such inputs may shadow the effects of state gratitude on work-related behaviors by overriding the desire to reciprocate benevolence with a more salient motivational impetus to pursue alternative goals. In contrast, the effects of state gratitude will be stronger when there are less salient cues or stimuli available at work that directs employees' helping and in-role behaviors. Thus, I propose two alternative motivational cues that possibly weaken the effects of state gratitude: extrinsic job rewards and job dependency.

First, extrinsic job rewards provide a self-interested, cognitive motive for these behaviors. Indeed, helping and in-role behaviors are expected and desired in most organizations, so they often involve economic, extrinsic rewards and incentives (e.g., opportunities for pay raises or promotions), which possibly act as significant cognitive motivational cues (Ryan & Deci, 2000). Studies have shown that many employees are motivated by such cues. Employees engage in helping behaviors, for example, to gain a favorable supervisor rating and peer reputation for



promotion (Bolino, 1999; Podsakoff, MacKenzie, & Hui, 1993). In-role behaviors are undeniably more directly linked with such cues in most organizations, including promotions and pay decisions (Bazerman, Beekun, & Schoorman, 1982; Cadsby, Song, & Tapon, 2007). These cues may or may not motivate employees' actual behaviors, but regardless, their availability weakens the effects of affective motivations, as they distract the affective process of motivating.

When such extrinsic job rewards are unavailable, though, or when employees' perceived relationships between their behaviors and extrinsic or economic rewards are weak, the predicted relationship between the desire to reciprocate benevolence and helping behaviors will likely be stronger, consistent with ATF and functional approaches to emotions (e.g., Forgas, 1995; Lerner & Keltner, 2000). There are occasions in which extrinsic job rewards may not or cannot serve as a significant motivational cue in organizations. For example, some jobs are not as economically privileged as other jobs by their nature (e.g., Bunderson & Thompson, 2009; Sluss & Ashforth, 2007). Similarly, in many not-for-profit organizational settings, people are often expected to sacrifice their economic benefits for public benefits. Likewise, in for-profit organizational settings, organizations sometimes go through financial difficulties and major changes, so employees' job rewards are uncertain and suffer due to restructuring and downsizing (Cascio, 1993, 2005).

In these situations, an affective motivation to reciprocate benevolence may be more important in determining work behaviors, as the effect of this affective motivation is not distracted or crowded out (Cardador & Wrzesniewski, 2015) by the presence of cognitive, extrinsic cues for the behaviors. This is consistent with earlier work in social psychology showing links between state gratitude and coping and resilience (e.g., Fredrickson, Tugade,

Waugh, & Larkin, 2003; Vernon, Dillon, & Steiner, 2009). That is, positive effects of state gratitude will be more salient in challenging organizational and job situations.

*Hypothesis 5a. Extrinsic job rewards moderate the relationship between the desire to reciprocate benevolence at work and helping behaviors, such that the relationship is stronger when an employee has more unfavorable extrinsic job rewards.*

*Hypothesis 5b. Extrinsic job rewards moderate the relationship between the desire to reciprocate benevolence at work and in-role behaviors, such that the relationship is stronger when an employee has more unfavorable extrinsic job rewards.*

*Hypothesis 5c. Extrinsic job rewards moderate the relationship between state gratitude and helping behaviors through the desire to reciprocate benevolence at work, such that the relationship is stronger when an employee has more unfavorable extrinsic job rewards.*

*Hypothesis 5d. Extrinsic job rewards moderate the relationship between state gratitude and in-role behaviors through the desire to reciprocate benevolence at work, such that the relationship is stronger when an employee has more unfavorable extrinsic job rewards.*

Second, job dependency may involve a normative or coercive motive for helping and in-role behaviors, or a perceived sanction against not engaging in these behaviors. In some situations, helping and in-role behaviors are strongly expected and even required. Consequently, doing less or none of these behaviors can involve implicit and explicit sanctions that may also act as significant cognitive motivational cues (Ryan & Deci, 2000). Particularly when an individual's tasks are heavily dependent on others' tasks, such sanctions, both perceived and actual, are strong, since others' evaluations and perceptions of the person are critical in the completion and performance of his or her tasks. In a similar vein, studies have shown that employees who have less power or more dependence on others have stronger motives for impression management and

thus engage in helping behaviors more frequently (Ashford & Cummings, 1983; Bowler & Brass, 2006; Morrison & Bies, 1991).

On the other hand, when such dependency is weak among employees, the predicted relationship between the desire to reciprocate benevolence and helping and in-role behaviors will likely be stronger, consistent with ATF and functional approaches to emotions (e.g., Forgas, 1995; Lerner & Keltner, 2000). There are jobs that involve a lower level of dependence or interdependence. For example, there are an increasing number of freelance workers, independent contractors, and independent consultants, and there are many professions where one's tasks are more independent than in other professions, such as pharmacists, computer scientists, and physical therapists. Moreover, many contemporary jobs that are described as "virtual," "distributed," and "dispersed" involve a lower level of dependence than other jobs in general (e.g., Kirkman, Rosen, Tesluk, & Gibson, 2004; Wageman, Gardner, & Mortensen, 2012). In these situations, similar to the impact of extrinsic job rewards, an affective motivation to reciprocate benevolence may be more important in determining their work behaviors, as the effect of this affective motivation is not distracted or crowded out (Cardador & Wrzesniewski, 2015) by the presence of normative, cognitive cues for the behaviors. Thus, I hypothesize

*Hypothesis 6a. Job dependency moderates the relationship between the desire to reciprocate benevolence at work and helping behaviors, such that the relationship is stronger when an employee has a job that is less dependent on others.*

*Hypothesis 6b. Job dependency moderates the relationship between the desire to reciprocate benevolence at work and in-role behaviors, such that the relationship is stronger when an employee has a job that is less dependent on others.*

*Hypothesis 6c. Job dependency moderates the relationship between state gratitude and helping behaviors through the desire to reciprocate benevolence at work, such that the relationship is stronger when an employee has a job that is less dependent on others.*

*Hypothesis 6d. Job dependency moderates the relationship between state gratitude and in-role behaviors through the desire to reciprocate benevolence at work, such that the relationship is stronger when an employee has a job that is less dependent on others*

### 3. METHODS

#### 3.1. Sample and Procedure

Participants in this study were employed graduate students at a private university in the eastern United States who work more than 20 hours per week. Initially, 662 students were invited in 14 classes in the schools of management, nursing, social work, and theology and ministry. Of the 662 invited students, 223 individuals started the first stages of the survey for a response rate of 33.7%.

Participants first completed a one-time survey (hereafter referred to as the “initial survey”). The initial survey assessed participants’ demographic information, extrinsic job rewards, and job dependency. The participants were also asked to nominate at least one supervisor and two peers who could provide feedback on his/her work attitudes and behaviors, and 310 supervisors and peers were nominated.

Approximately a week after the completion of the initial survey, I asked participants to report their emotions experienced at work daily for three weeks using interval contingent experience sampling (Ilies & Judge, 2002; Wheeler & Reis, 1991). Participants received a reminder email at 2:00p.m. each day to complete the daily survey—at or near the end of their workday (Ilies, Scott, & Judge, 2006).

The day after the end of the daily survey period, participants and the nominated peers and supervisors received an email containing a link to their portions of survey (i.e., hereafter referred to as the “final survey”). The final survey was to measure focal participants’ helping and in-role behaviors (both self-rated and other-rated), but this chapter only includes other-rated data in the analysis<sup>1</sup>. The focal participant who had at least one peer or supervisor completing his or her survey was included in the analysis. For the focal participants who had more than one matched external evaluator, I averaged multiple evaluators’ ratings. Analyses that showed an adequate level of intra-class correlations (ICC) are discussed below.

Among 223 individuals, participants who 1) completed the initial survey, 2) nominated at least one external evaluator, 3) answered at least one daily survey, and 4) had at least one evaluator who completed their survey were only included in the following analyses. I included those who answered at least one daily survey, since I controlled the number of daily responses in the analysis. Thus, the final samples consisted of 135 participants and 288 of their supervisors and peers who completed the final survey. Participants were compensated by gift cards after the study ended. They received \$5.00 for completing the initial survey and \$2.00 for completing the daily survey each day. Study participants were, on average, 28.8 years old and 30% of the participants were men.

### **3.2. Measures**

***Independent and mediating variables (Daily survey).*** First, participants' emotional states, their experience of responsiveness-receiving events, and their desire to reciprocate benevolence at work were measured by a daily survey. Responsiveness-receiving events were measured by using the three items developed by Cutrona (1986) and modified by Mohr, et al. (2001). I further

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<sup>1</sup> The detailed description of the self-rated final survey is in Chapter 6.

modified this measure by adding “in my workplace” to specify the context in which they experienced such desire. The items included, “Today, people in my workplace gave me needed advice or help on something,” and “People in my workplace expressed caring and concern for me today.”

To assess participants' positive emotional states, five affect-related adjectives were used (Barrett & Russell, 1998). They included “excited,” “attentive,” “joyful,” “enthusiastic,” and “serene.” State gratitude was measured by using three adjectives: “grateful,” “thankful,” and “appreciative,” consistent with earlier studies on gratitude in social psychology (e.g., McCullough et al., 2004; Tsang, 2006). For both sets of items, participants were asked to indicate the extent to which they were experiencing each emotional state at work on a given day, using a scale ranging from 1 (not at all) to 5 (very much).

Next, the participants' desire to reciprocate benevolence was also accessed by a daily survey, using the measure developed by Dohmen, Falk, Huffman, and Sunde (2009). I modified this measure by adding “at work” to specify the context in which they experienced such desire. The items included, “I am ready to go out of my way to help people who have been kind to me at work,” and “I am willing to accept personal costs in order to help other people at work who have been helpful.”

A total of 1196 daily surveys were collected, and each participant provided 1 to 15 daily reports, averaging 8.86 times with a standard deviation of 3.84. The indices of responsive-receiving events, positive emotions, state gratitude, and desire to reciprocate benevolence were calculated each day for each participant by taking the average of the corresponding items. Then first for the within-person level analysis, these daily indices were used as they are. But for the between-individual level analysis which will be discussed below, these indices were then further

averaged over days for each participant, consistent with existing studies (Fisher & Ashkanasy, 2000; Seo & Barrett, 2007; Weiss et al., 1999). In this way, in the second analysis, a higher score on each index indicated that the participants experienced more frequent responsiveness-receiving events, greater positive and grateful feelings, and had a greater desire to reciprocate benevolence over the three weeks at work. The details are described below.

***A moderating variable (Initial survey).*** Participants' perceived favorability of their extrinsic job rewards was measured using a four-item measure created by Stinglhamber & Vandenberghe (2004). Participants were asked to rate the favorability of each extrinsic job reward, using a 5-point Likert scale ranging from 1 (very unfavorable) to 5 (very favorable). Sample items included, "opportunity for pay raises," "opportunity for career advancement," and "fringe benefit".

Similarly, participants' job dependency was measured by using a subset of job interdependence scale developed by Morgeson & Humphrey (2006), also using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items included, "the job activities are greatly affected by the work of other people," and "The job depends on the work of many different people for its completion."

***Dependent variables (Final survey).*** Helping and in-role behaviors were assessed by focal participants' nominated supervisors and peers. First, to measure helping behaviors, I used four items developed by Van Dyne and LePine (1998). The nominated coworkers were asked to indicate, using 5-point scales (1 [never] to 5 [frequently, if not always]), how often the target person engaged in helping behaviors at work. The sample items included, "(This particular person) gives his/her time to help others who have work-related problems," and "(This particular person) assists others with their duties."

Second, to measure in-role behaviors, I used four items from Williams and Anderson's (1991) measure (cf. Van Dyne & LePine, 1998), by asking the focal participants' coworkers to answer each item with a Likert scale ranging from 1 (never) to 5 (frequently, if not always). Items included, "(This particular person) fulfills the responsibilities specified in his/her job description," and "(This particular person) performs the tasks that are expected as part of the job."

To determine whether it was appropriate to create an average rating of a focal participant's helping and in-role behaviors, I computed an intra-class correlation coefficient (ICC). Because the data of this study consist of ratings from different judges for each focal employee, I employed ICC (1,2) (Shrout & Fleiss, 1979). At this point I excluded those who had only one rater. For those who had more than two raters, I included only two raters' ratings, which were randomly chosen for the sake of analysis. The randomness of choosing two raters allowed the analysis to represent all samples, including those with more than two raters (Landers, 2015). The ICC indicated a fair, significant level of agreement for in-role behaviors (ICC=.47,  $p < .01$ ) which is above the .4 that Cicchetti and Sparrow (1981) considered acceptable. Helping behaviors showed a relatively smaller ICC (ICC = .35,  $p < .05$ ). However, given the small size of samples and a generally modest level of ICC in other studies (e.g., a median ICC [1,1] of .12 for the organizational climate in relevant studies and ICC [1,2] of .36 for a taking charge measure in James (1982) and Morrison and Phelps (1999), respectively), I concluded that it was appropriate to average the two or three multiple ratings for those who had more than one rater ( $n = 99$ ) and to use the single rating for those who had a single rater ( $n = 36$ ).

***Control variables (Initial and daily survey).*** Following the recommendation from Spector and Brannick (2010), I carefully chose and included control variables in the analyses whose relationships with independent and dependent variables had been theoretically or empirically



explored. First, participants' gender, age, and professional rank were measured to be controlled, because studies have shown that these demographic variables impact employees' helping and/or in-role behaviors (e.g., Greenhaus & Parasuraman, 1993; Kidder, 2002; O'Brien, Biga, Kessler, & Allen, 2008). Consistent with previous studies (e.g., Forret & Dougherty, 2001; Hertz & Donovan, 2000; Organ, 1994), I also controlled for conscientiousness and extroversion traits to examine the hypothesized relationships after taking into account the possible influences of individual personalities, particularly on in-role behaviors and helping behaviors, respectively.

Further, some research has pointed to the possibility that emotional fluctuation can influence individuals' well-being and performance (e.g., Totterdell, 2000; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009). Hence, I included standard deviations of positive emotions and state gratitude as controls to consider the potential impacts of individuals' emotional fluctuations on their work outcomes. Lastly, acknowledging the possibility that participation in daily surveys could create measurement reactivity since respondents' self-reflected awareness increases as they answer the surveys more frequently (Barrett & Barrett, 2001), I included the total number of daily responses as controls to consider the potential impacts of measurement reactivity on their work outcomes.

### **3.3. Analyses and results**

To model the relations among daily responsive-receiving events, state gratitude, the desire to reciprocate benevolence, extrinsic job rewards, job dependency, and in-role and helping behaviors, I used hierarchical linear modeling (HLM), multivariate regression analysis, and bootstrapping analysis.

HLM allowed me to analyze variables at multiple levels of analysis in a series of regression equations. In this chapter, the first level of analysis included the daily, repeated measures (over

time) of state gratitude and positive affect. The second level of analysis included all control variables, such as age, gender, and the measure of conscientiousness and extroversion. Thus, the Level 1 variables were at the within-person level of analysis, whereas the Level 2 variables were at the between-individual level of analysis. I used R software to analyze the hierarchical models. I expected consistent results between the within-individual analysis and across-individual analysis of state gratitude, since state gratitude, as a particular type of positive affect, tends to endure, not as long as job gratitude but as long as other positive moods, due to the mood congruence and maintenance tendency (e.g., Meyer & Allen, 1991). To interpret the estimates as representing strictly within-individual relations, I centered the predictor variables at each individual's mean (Hofmann, Griffin, & Gavin, 2000). This centering method removes any between-individual variance in estimates of within-individual relations among the variables, assuring that the relations among the within-person variables are not confounded by other individual differences.

Second, to examine the accumulated effects of state gratitude on work-related behaviors and their boundary conditions, I use a series of OLS regression analyses and bootstrapping methods. Here I aggregated the daily indices of state gratitude and the desire to reciprocate, and test their effects on in-role and helping behaviors. I used SPSS software for these analyses. Table 9 reports the reliabilities, means, standard deviations, and correlations for all variables.

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Insert Table 9 about here  
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***Within-individual analysis.*** At the day level, I first investigated whether systematic within- and between-individual variance existed in the day-level variables (i.e., state gratitude

and the desire to reciprocate) by estimating a null model for each variable. As shown in Table 10, the null model results indicate that there is significant between-individual variance in each of the dependent variables and substantial proportion of the total variance (41% for state gratitude and 37.6% for the desire to reciprocate) in these dependent variables was within individuals. These results suggest that hierarchical modeling of these data was appropriate.

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Insert Table 10 about here  
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To test the antecedents and consequences of state gratitude at the day level, I estimated a series of regressions in HLM with day-level variables predicting the desire to reciprocate benevolence. As shown in Table 10, Hypothesis 1 which predicts the positive relationship between the responsive-receiving events and state gratitude within individuals is supported, and Hypothesis 2 which predicts the consequence of state gratitude – the desire to reciprocate benevolence – is also supported within individuals after controlling the effects of positive affect. In other words, the responsive-receiving events are positively related to state gratitude, and state gratitude is positively related to the desire to reciprocate benevolence on a day-to-day basis.

***Between-individual analysis.*** Here I present the results of between-individual level analysis to test the model of accumulated state gratitude, using accumulated state gratitude, desire to reciprocate benevolence, and responsiveness-receiving events over the 3 weeks of period. Table 11 presents the results of testing the effects of responsive receiving events on the experience of state gratitude. As seen in Model 1, the events in average had a significant positive association with the experience of state gratitude ( $b=.319, p<.001$ ), and thus Hypothesis 1 was

supported. Therefore, the results are consistent with my findings on the within-individual level analysis.

As seen in Model 2, state gratitude had a significant positive association with the desire to reciprocate benevolence ( $b=.349, p<.05$ ), consistent with Hypothesis 2. The desire to reciprocate benevolence at work showed a positive association with in-role behaviors (Model 4:  $b=.210, p<.05$ ), supporting Hypothesis 4a. However, Hypothesis 3a was not supported, as helping behaviors did not show a significant association with the desire to reciprocate (Model 3:  $b=.091, p>.10$ ).

To test the mediating effects of the desire to reciprocate benevolence between state gratitude and these behaviors, I used a bootstrapping approach suggested by Preacher and Hayes (2008). In doing this, I examined the indirect effects of state gratitude on the outcome variables via the desire to reciprocate benevolence at work. Bootstrapping is considered a better approach for testing indirect effects than the traditional Sobel test, as it imposes no assumptions about the distribution of indirect effects (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). I used an SPSS macro PROCESS provided by Hayes (2013), which facilitates an estimation of the indirect effect with a bootstrap approach to obtain confidence intervals. Specifically, I used a bias-corrected bootstrap procedure with 5,000 iterations of resampling. As shown at the bottom of Table 11, the results showed that the indirect effect on helping behaviors through the desire to reciprocate benevolence was not significant ( $b=.0231, 95\% \text{ CI: } -.0374, .1136$ ). The indirect effect on in-role behaviors was only marginally significant, as zero is excluded only in 90% confidence interval ( $b=.0525, 90\% \text{ CI: } .0061, .1386$ ), not in the 95% ( $b=.0525, 95\% \text{ CI: } -.0013, .1664$ ). Therefore, Hypothesis 4b was marginally supported.

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Insert Table 11 about here

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***Moderating effects of extrinsic job rewards and job dependency.*** Next, I tested the moderating effects of extrinsic job rewards (Table 12). I first ran a hierarchical regression analysis, including standardized values of state gratitude, the favorability of extrinsic job rewards, and their interaction terms. Their interaction terms were significant only with helping behaviors ( $b = -.258, p < .01$ ), but not with in-role behaviors ( $b = -.133, p > .10$ ). Therefore, Hypothesis 5a was supported. Second, the interaction terms between state gratitude and job dependency were significant both with helping ( $b = -.261, p < .01$ ) and in-role behaviors ( $b = -.183, p < .01$ ), consistent with Hypotheses 6a and 6b. I depicted graphically the interactions between the desire to reciprocate benevolence and extrinsic job rewards as well as job dependency, following Aiken and West (1991). The relationships between the desire to reciprocate benevolence and the two outcome behaviors are plotted at 1SD above (high extrinsic job rewards and high job dependency) and 1SD below (low extrinsic job rewards and low job dependency). Figure 5 shows that when employees have unfavorable extrinsic job rewards or low job dependency, their desire to reciprocate benevolence is more positively associated with helping and in-role behaviors.

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Insert Table 12 and Figure 5 about here

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Concerning Hypothesis 5c, 5d, 6c, and 6d, I tested the moderated mediated relationships, following the statistical routines developed by Preacher, Rucker, and Hayes (2007; Moderated mediation). I estimated the indirect effects (and confidence intervals for the effects) of state gratitude at work on the two outcome variables carried through the desire to reciprocate

benevolence at different values of favorable extrinsic job rewards. In other words, I took into account the possibility of a statistically significant indirect effect being contingent on the value of the proposed moderators: extrinsic job rewards and job dependency. To test these moderators, I again used an SPSS macro PROCESS designed by Hayes and his colleagues (2013), which provides a method for probing the significance of conditional indirect effects at different values of the moderator variable (a bias-corrected distribution procedure with 5000 iteration).

The results of this analysis are summarized at the bottom of Table 12 (Dong, Seo, & Bartol, 2014). Consistent with my hypotheses, the size of indirect effects on all outcome variables were larger when the job rewards were less favorable and the job was less dependent on others. Specifically, the moderating effect of unfavorable job rewards on the indirect relationship of state gratitude with helping behaviors ( $b = -.0908$ , 95% CI:  $-.2459, -.0120$ ) was significant, but not with in-role behaviors ( $b = -.0429$ , 95% CI:  $-.1719, -.0409$ ). The moderating effects of job dependency on the indirect relationships of state gratitude with helping behaviors ( $b = -.0593$ , 95% CI:  $-.1789, -.0095$ ) and with in-role behaviors ( $b = -.0376$ , 95% CI:  $-.1251, -.0048$ ) were both significant. In other words, the indirect effects of state gratitude on helping behaviors via the desire to reciprocate benevolence were significant only at the low level of the job rewards (-1 SD, 3.21) and job dependency (-1 SD, 2.87). At the higher level of job rewards (+1 SD, 4.87) and job dependency (+1 SD, 4.81), the indirect effect on any outcome behaviors was not significant.

The results showed, however, no significant mediating effect of the desire to reciprocate benevolence on the relationship between state gratitude and in-role behaviors at any level of extrinsic job reward, showing no moderating effect of extrinsic job rewards. Therefore, Hypotheses 6a and 6b were supported, but 6c was not supported.

#### 4. *DISCUSSION*

Drawing on AET and ATF, this chapter develops and tests a theoretical model of state gratitude at work, which sheds light on the affective motivational mechanisms through which state gratitude is associated with individual work behaviors: prosocial and in-role behaviors. I further show the moderating effects of extrinsic job rewards and job dependency in the affective processes.

The regression results suggest that daily responsive-receiving events facilitate state gratitude and state gratitude facilitates the desire to reciprocate benevolence at the both within individuals and between individual level (Hypothesis 1 & 2). The between-individual analysis further showed that state gratitude enhances employees' in-role behaviors through the mechanism of the desire to reciprocate benevolence at work, supporting Hypotheses 2 and 4a. The bootstrapping analysis, however, showed that the mediating effects of the desire to reciprocate benevolence are only marginally supported (Hypothesis 4b). The desire to reciprocate benevolence is not significantly related to helping behaviors, so Hypotheses 3a and 3b were not supported. Moreover, the mediated relationships between state gratitude and prosocial and in-role behaviors vary depending on employees' job conditions. To be more explicit, I found that the positive impacts of state gratitude on helping behaviors, though not on in-role behaviors, are stronger when extrinsic job rewards are unfavorable, supporting Hypotheses 5a and 5c, but not 5b and 5d. Furthermore, when job dependency is low, the positive impacts of state gratitude on both helping and in-role behaviors are stronger, supporting Hypotheses 6a, 6b, 6c, and 6d.

Hypotheses 3a and 3b (the mediating effects of the desire to reciprocate on helping behaviors) were not supported, possibly because of a canceling-out effect; as shown in Figure 5, for those who have very favorable extrinsic job rewards, their desire to reciprocate has no or possibly a negative impact on helping behaviors. Thus its positive impact with those who have unfavorable

rewards may be set off when we examine their relationship with the entire sample. However, the results showed that the effects of the desire to reciprocate benevolence on in-role behaviors were still (marginally) significant with the entire samples, suggesting that extrinsic job rewards have a stronger moderating effect on helping behaviors than on in-role behaviors.

These results may be explained by the differences in the nature of helping behaviors from in-role behaviors. In-role behaviors at work often involve multiple other cognitive motives, such as making a living and fulfilling needs for achievement. Helping behaviors, however, involve mostly only two motives in work contexts: altruism for internal needs and reputation for extrinsic rewards (Baker & Bulkley, 2014). Thus, the crowding-out effects of cognitive/self-interested motives (i.e., reputation/extrinsic rewards) on those of affective/other-oriented motives (i.e., the desire to reciprocate benevolence) may be more salient for helping behaviors due to their little involvement of other motivations.

The results of this study make contributions particularly to the literature on work motivation. Traditionally, studies of work motivation have perceived employees' work motivation as stable, assuming that the stable characteristics of jobs and individuals are the main determinants of *enduring work motivation*. Yet few recent studies explored temporal, affective motivation, which varies not only across individuals, but also within individuals (e.g., Guay, Vallerand, & Blanchard, 2000; Seo et al., 2010). Consistent with this approach, I challenge the static view of work motivation by proposing a unique affective motivation that state gratitude involves: the desire to reciprocate benevolence. Specifically, this chapter shows that this desire varied daily (with the standard deviation of .7 in the Likert scale of 1 to 5 over three weeks) and influenced employees' in-role behaviors in an aggregated form. Stable job characteristics, extrinsic job



rewards and job dependency, however, did not show significant direct effects on employees' work-related behaviors.

Future research is needed to address several limitations of this study. My data provide other-rated behaviors only at the individual level, not the day level, allowing me only analyze the effects of accumulated state gratitude on work-related behaviors. Further research is needed to examine the link between state gratitude and work-related behaviors both at the day level. Relatedly, future research also requires more refined analysis with day-level data, since I tested only the links between the accumulated forms of day-level data and outcome behaviors. Positive affect in general including state gratitude tends to last in a short term in a form of moods, due to mood congruence or maintenance tendency. Thus state gratitude may not be as enduring as job gratitude or any other job-related attitudes or personalities, but still tend to last over days and weeks, so it is still meaningful to test the effects of accumulated state gratitude over the 3 weeks. However, more refined day level analysis, such as time series analysis, may help advance the dynamics of state gratitude in workplaces.

Also, as I analyzed state gratitude, positive emotions, and the desire to reciprocate, which were consciously accessed and described by participants, I included only a conscious process that state gratitude involves. However, affective processes can take place both consciously and unconsciously (Chartrand & Bargh, 1999; Winkielman, Zajonc, & Schwarz, 1997). This study design did not access the unconscious processes, and it is also possible that participation in the surveys, especially the daily ones, may have suppressed or amplified the unconscious process related to state gratitude. Thus, exploring state gratitude with a neuropsychological and experimental research design will be a valuable direction for future research.

Also, although I sampled participants from different industries and organizations to increase representativeness and to randomize the effects of their affiliations, the samples of this study were early-career employees. Moreover, although no significant statistical difference was found, the samples belong to several professional schools in one educational institution, and consist of more women than men. It is also possible that as employees become more experienced and older, or graduate from their schools, the effects of their job-related attitudes, particularly job gratitude, get weaker or stronger. Future research should examine the generalizability of the present findings by sampling participants across a range of career stages, managerial ranks, and professions.

# CHAPTER 6. DEVELOPMENT AND TEST OF A THEORETICAL MODEL OF JOB GRATITUDE

## 1. INTRODUCTION

In Chapter 3, I defined *job gratitude* as an enduring positive affect toward one's job with an overall, long-term belief that one has received benefits in his/her job in general. Focusing on this particular form of gratitude, in this chapter I first identify antecedents of job gratitude in the dimension of job characteristic, individual characteristic, and affective experiences. Second, focusing on the consequences of job gratitude, I suggest *intended help* as a core mechanism through which job gratitude influences work-related behaviors, including helping, voice, and organization-directed citizenship behaviors.

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Insert Figure 6 about here

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## 2. A THEORETICAL MODEL OF JOB GRATITUDE

### 2.1. Antecedents of job gratitude

Positing the distinction between affective reactions and general work-related attitudes, AET (Affective Events Theory [Weiss & Cropanzano, 1996]) argues that job-related attitudes, their nature, causes, and consequences should be investigated separately from those of affective responses at work. The theory shows that unlike affective responses, which are mainly determined by daily work events, work-related attitudes are strongly influenced by more stable job characteristics and individual characteristics, such as task characteristics and dispositional affectivity (Fisher, 2002; Weiss & Cropanzano, 1996). In this vein, job gratitude may be noticeably affected, but may not be solely determined, by one's dispositional gratitude—one's

general tendency to experience gratitude. Existing studies have shown that individuals with a high level of grateful dispositions are more likely to experience gratitude toward diverse aspects of their lives, including their parents, partners, and families (McCullough et al., 2004). In line with these studies, I propose an individual's job may be one of the targets for which those with grateful dispositions are generally grateful.

*Hypothesis 1: Dispositional gratitude is positively associated with job gratitude.*

Second, I propose job social support as another stable factor that influences one's level of job gratitude. Job design theory categorizes multiple job characteristics that affect employees' work-related attitudes and behaviors, including a job's task-related, social, and organization-related properties (Hackman & Oldham, 1976; Humphrey et al., 2007). Among them, job social support refers to the extent to which a job provides opportunities for getting assistance and advice from others at work (Karasek et al., 1998; Karasek, 1979). It takes both instrumental and emotional forms, such as peer advice and friendship opportunities on the job (House, 1981; Sims, Szilagyi, & Keller, 1976).

Having jobs that provide more social support, employees have more opportunities to benefit from others, and are thus more likely to believe they have received benefits in their jobs. In this vein, existing studies have shown that most employees have a general perception of the extent to which the organization and supervisor care about their well-being (e.g., Eisenberger et al., 1986; Rhoades & Eisenberger, 2002), and that such perception is often based on employees' general beliefs concerning received benefits from the organization or supervisors (Eisenberger et al., 1986; Rhoades & Eisenberger, 2002).

In addition to the belief of receiving benefits, an employee is likely to have more positive affect toward their job if it is one with more social support. Basic psychological needs theory

(Deci & Ryan, 1985) argues that receiving a social support is related to the positive affect, as an individual feels more connected and attached to others in the job (Deci & Ryan, 1985). Similarly, Wrzesniewski et al. (2010) argued that a connection with others has significant meaning for many individuals, often leading to positive affective experiences at work. Likewise, the job-demands model (Bakker & Demerouti, 2007) also showed that social support provides stress-buffering effects, as it may protect employees from work overloads and job strain, helping to maintain employees' positive affect (e.g. Haines, Hurlbert, & Zimmer, 1991; Johnson & Hall, 1988; Van der Doef & Maes, 1999).

Taken together, since jobs providing more social support lead employees to believe they have received benefits and to feel positively about their jobs, I hypothesize,

*Hypothesis 2: Job social support is positively associated with job gratitude.*

However, one's level of job gratitude may not be completely independent from recent affective experiences. Attitude scholars have shown that an average level of affective reactions does influence the attitudes following the reactions, since attitudes are formed by a compilation of beliefs, affects, and experiences related to the attitude object (Eagly & Chaiken, 1993). In other words, attitudes are partially updated by recent affective responses. Weiss (1999) showed that an average level of pleasant moods predicts a unique variance in job satisfaction over and above that predicted by an enduring belief about the job.

Accordingly, job gratitude may be influenced by the average level of state gratitude that was recently experienced. Employees who have frequently experienced state gratitude from a series of recent events (e.g., receiving a promotion or pay increase from the company, emotional support, or encouragement from supervisors) may report a higher level of job gratitude than those who have not experienced state gratitude for some time. As Eagly and Chaiken (1993)

viewed attitudes as accumulations of the memories and feelings about the attitude object, job gratitude is updated by recent experiences or memories of state gratitude at work. Thus, although there are other factors determining employees' job gratitude, the average level of state gratitude during a certain period of time may partially explain the level of job gratitude following the period.

*Hypothesis 3: The experience of state gratitude at work is positively associated with job gratitude.*

## **2.2. Consequences of job gratitude**

***The mechanism of intended help.*** Here I propose a mechanism through which job gratitude influences employees' work-related behaviors: *intended help*, as a generalized form of the desire to reciprocate benevolence. Job gratitude may involve such altruistic motives and thus lead to genuine, intended help at work. A high level of job gratitude indicates that employees believe they have received benefits from others in their jobs, including their coworkers, supervisors, organizations, and unidentified others at work. Similar to the mechanism of the desire to reciprocate benevolence that state gratitude involves, this enduring belief may also involve a motivation or a behavioral attitude to help others at work for the purpose of reciprocating. Given the enduring nature of job gratitude, however, this motivation may be more lasting and conscious than the desire to reciprocate benevolence.

Moreover, employees with high levels of job gratitude are likely to perceive that others at work may generally have altruistic, benevolent motives toward them. Such perception may make the focal employees also have altruistic motives, since people tend to imitate and conform to others' interaction rules and motivation toward themselves; people tend to be self-interested towards a self-interested partner, and to be altruistic toward an altruistic partner (Meeker, 1971).

Similarly, studies have shown that the observation of self-sacrificing, helping behaviors of others can lead to subsequent prosocial, benevolent behaviors (Barry & Wentzel, 2006; Bryan & Test, 1976; Hartup & Coates, 1967). Thus, based on such genuinely altruistic motives to help and benefit others, I propose the positive impact of job gratitude on intended help.

*Hypothesis 4: Job gratitude is positively associated with intended help.*

**Consequences of job gratitude.** I further propose that the intended help that employees with high job gratitude possess is manifested in several extra-role behaviors, including actual helping behaviors, organizational citizenship behaviors directed to an organization, and voice behaviors.

Employees' intended help may be positively related to actual helping behaviors. As state gratitude is positively related to actual helping behaviors through the desire to reciprocate benevolence, job gratitude may also facilitate helping behaviors through intended help. Both the desire to reciprocate benevolence and intended help are prosocial and other-oriented, being manifested and observed as actual helping behaviors meant to benefit or help others at work. The only difference between the two is the duration of the behaviors, since state gratitude and job gratitude take place over different lengths of time, as discussed in Chapter 3 and Figure 3. In this vein, scholars have explored both the long-term and short-term predictors of helping behaviors separately, such as the perception of fairness and daily moods, respectively (e.g., Binnewies, Sonnentag, & Mojza, 2009; Moorman, 1991). Thus, in addition to the effects of state gratitude, the variance of actual or observed helping behaviors may be explained by job gratitude through the mechanism of intended help.

*Hypothesis 5a: Intended help is positively associated with helping behaviors.*

*Hypothesis 5b: Intended help mediates the impact of job gratitude on helping behaviors*

Moreover, job gratitude may increase organization-directed citizenship behaviors, as intended help that accompanies job gratitude facilitates general, collective ways of being altruistic at work. This may be resulting from employees identifying the organization as a fundamental source of the benefits they have received in their job, since the organization is the entity that embraces the features and conditions of the job as well as the people with and for whom they work. As has already been studied, employees are likely to ascribe things for which they are grateful to the organization, anthropomorphizing the organization with those things (Pratt, 2000; Sluss & Ashforth, 2008). For example, employees may be grateful *to* their organizations *for* providing good, generous perks and a good career network, thus being motivated to help the organization. Moreover, Granovetter (1992) showed that an individual employee is embedded in their relationship with the organization in many ways, which often results in their interests, goals, and values being connected or shared in various degrees. Because of this, people may perceive that other employees, including those to whom they are grateful, are commonly embedded in the organization, and that their interests and benefits are likewise interdependent with those of the organization. Thus, employees may think that benefitting the organization can ultimately help other individuals within the organization, including those to whom they are grateful. Aligning with this, scholars have shown that grateful people are more motivated to give back to their neighborhood, community, and world to which they belong (Froh, Bono, & Emmons, 2010).

Several studies have shown that organization-directed citizenship behaviors are more stable over time and more strongly related to employees' enduring beliefs than individual-directed helping behaviors (Lee & Allen, 2002; McNeely & Meglino, 1994; Skarlicki & Latham, 1996). Thus, organization-directed citizenship behaviors may be significantly related to job gratitude.



*Hypothesis 6a: Intended help is positively associated with observed organizational citizenship behaviors directed to an organization.*

*Hypothesis 6b: Intended help mediates the impact of job gratitude on observed organizational citizenship behaviors directed to an organization.*

Furthermore, I propose the positive relationship between job gratitude and voice behaviors. Voice behaviors are defined as employees' expressions or attempts to communicate with constructive ideas, information, and opinions about change in organizations (Van Dyne & LePine, 1998). They often involve speaking to or communicating with someone with the perceived power to devote organizational attention or resources to the issue at hand (Detert & Burris, 2007). Despite the positive functions of voice behaviors in organizations, employees often perceive potential risks and costs of voice behaviors, such as demotion, humiliation, and loss of social standing as a result of resistance from authorities and those with power in the organization (Detert & Burris, 2007).

I propose that intended help accompanying job gratitude increases one's willingness to speak up and even to be counted for the purpose of helping others and one's organization. This could be resulting from motives shifting the focal employee's attention from personal risk(s) and cost(s) toward the potential benefit(s) and improvement(s) of others and the organization. In other words, when employees have a high level of job gratitude and thus have a high level of intended help, the perceived benefits of voice behaviors to the organizational and other employees are likely to outweigh the cost to personal standing or self-interest. Similarly, studies on gratitude have shown that employees experiencing state gratitude or having high dispositional gratitude are more willing to help others even when such behaviors come at a cost to them (Bartlett & DeSteno, 2006; Tsang, 2006). Thus, I hypothesize,

*Hypothesis 7a: Intended help is positively associated with observed voice behaviors.*

*Hypothesis 7b: Intended help mediates the impact of job gratitude on observed voice behaviors.*

### 3. METHODS

#### 3.1. Sample and Procedure

For this study, I used the subset of data that were collected from the same sampling procedure in Chapter 5. More specifically, data collected from the self-rated initial and final surveys as well as the other-rated final survey were used.

#### 3.2. Measures

***Independent variables (Initial & Daily self-rated)*** I measured and examined dispositional gratitude, job social support, and state gratitude as antecedents of job gratitude. Participants' dispositional gratitude was measured using a six-item measure generated by McCullough et al. (2002). Responses were made on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Sample items included, "When I look at the world, I don't see much to be grateful for," and "As I get older I find myself more able to appreciate the people, events, and situations that have been part of my life history." Second, to assess job social support, I used a six-item measure developed by Morgeson & Humphrey (2006). The sample items for job social support included, "I have the opportunity to develop close friendships in my job," and "I have the chance in my job to get to know other people." Responses to all measures were made on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Last, state gratitude was measured by the same procedure as in Chapter 5 (the daily survey), using three adjectives, "grateful," "thankful," and "appreciative" (e.g., McCullough et al., 2004; Tsang, 2006), with a scale ranging from 1 (not at all) to 5 (very much). As described in Chapter 5,

the indices of state gratitude were calculated each day for each participant by taking the average of the corresponding items, which were further averaged over days for each participant (Fisher & Ashkanasy, 2000; Seo & Barrett, 2007; Weiss et al., 1999).

***Mediating variables (Final, self-rated)*** First, I measured job gratitude by using the seven items developed in Chapter 4. I also assessed self-reported, intended help at work in the Final survey by using four items of helping behaviors developed by Van Dyne and LePine (1998). These items were used as a proxy for intended help, rather than actual helping behaviors, as they reflect the focal participants' own perceptions and intentions of helping behaviors. The sample items included, "I give my time to help others who have work-related problems," and "I assist others with their duties."

***Dependent variables (Final, other-rated)*** Helping and voice behaviors as well as OCBO were assessed by focal participants' nominated supervisors and peers, using a Likert scale ranging from 1 (never) to 5 (frequently, if not always).

First, to measure helping behaviors, I used the same four items developed by Van Dyne and LePine (1998). Since they were measured by external evaluators, they indicate actual or observed helping behaviors of the focal participants rather than their intention(s). The sample items included, "(This particular person) gives his/her time to help others who have work-related problems," and "(This particular person) assists others with their duties."<sup>2</sup>

Second, four items also developed by Van Dyne and LePine (1998) were used to measure voice behaviors. Examples included, "(This particular person) speaks up and encourages others

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<sup>2</sup> I used the same measure from Van Dyne and LePine (1998) to assess intended help and helping behaviors since they are rated by focal participants and their evaluators, respectively. Van Dyne and LePine (1998) showed a relatively low correlation between self-rated and other-rated helping behaviors ( $r=.28^{**}$ ), differentiating self-rated ones from actual behaviors. Consistently, self-reported behaviors are often considered indicators of intention or willingness to act, rather than actual behaviors.

at work to get involved in issues that affect the team or organization,” and “(This particular person) speaks up with ideas for new projects or changes in procedures.”

Last, OCBO was measured by the five-item developed by Lee and Allen (2002). Items included, “(This particular person) attends functions that are not required but that help the organizational image,” and “(This particular person) offers ideas to improve the functioning of the organization.”

To determine whether it was appropriate to create an average rating of a focal participant’s work-related behaviors, I computed an intra-class correlations coefficient (ICC), following the same procedures as in the analysis in Chapter 5. The ICC indicated a fair, significant level of agreement for OCBO (ICC=.441,  $p<.01$ ) which were above the .4 that Cicchetti and Sparrow (1981) considered acceptable. Voice behaviors showed a relatively smaller ICC (ICC = .233,  $p<.05$ ). Again, given the small sample sizes and a generally modest level of ICC in the field (e.g., a median ICC (1,1) of .12 for the organizational climate in James [1982]), I concluded, as in Chapter 5, that it was appropriate to average the multiple ratings for those who had more than one rater ( $n = 99$ ) and to use the single rating for those who had a single rater ( $n = 36$ ).

***Control variables*** First, participants' gender, age, professional rank, and tenure were controlled for, because studies have shown that these demographic variables impact employees’ extra-role behaviors (e.g., Greenhaus & Parasuraman, 1993; Kidder, 2002; O'Brien, Biga, Kessler, & Allen, 2008). For the same reason, I also controlled for Big Five personality indices, using the measure developed by Gosling et al. (2003) in order to take into account the possible influences of individual personalities on the outcome variables (e.g., Forret & Dougherty, 2001; Hertz & Donovan, 2000; Organ, 1994).

### **3.3. Analyses and Results**

To model the relations among the antecedents and consequences of job gratitude, I ran a series of OLS regression analyses and bootstrapping analyses, using SPSS software for these analyses. I used OLS regressions instead of structural equation modeling due to a relatively small sample size and because a detected departures from multivariate normality. Table 13 reports the reliabilities, means, standard deviations, and correlations for all variables.

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Insert Table 133 about here  
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***Antecedents of job gratitude.*** Table 14 presents the results of testing the proposed antecedents of job gratitude. Job social support was positively related to job gratitude measured in the Final survey ( $b=.300$ ,  $p<.01$  in Model 1;  $b=.219$ ,  $p<.05$  in Model 2) and the averaged state gratitude was also positively related to job gratitude measured in the Final survey ( $b=.274$ ,  $p<.01$ ), supporting Hypotheses 2 and 3. However, job gratitude was not significantly related to dispositional gratitude. Thus, Hypothesis 1 was not supported.

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Insert Table 14 about here  
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***Consequences of job gratitude.*** As seen in Table 15, job gratitude is significantly and positively related to intended help ( $b=.252$ ,  $p<.01$ ), supporting Hypothesis 4. Intended help is positively associated with voice behaviors ( $b=.249$ ,  $p<.01$ ) and organization-directed citizenship behaviors ( $b=.189$ ,  $p<.01$ ), but only marginally with helping behaviors ( $b=.176$ ,  $p<.10$ ). Therefore, the findings supported Hypotheses 4, 6a, and 7a. Hypothesis 5a was marginally supported.

To test the mediating effects of the intended help between job gratitude and these behaviors, I also used a bootstrapping approach suggested by Preacher and Hayes (2008), as discussed in Chapter 5. In doing this, I examined the indirect effects of job gratitude on outcome variables via intended help. As shown at the bottom of Table 15, the results showed that the indirect effects of job gratitude on voice behaviors ( $b=.0543$ , 95% CI: .0072, .1637) and organization-directed citizenship behaviors ( $b=.0430$ , 95% CI: .0067, .1412) via intended help were significant. The indirect effect on helping behaviors was marginally significant ( $b=.0363$ , 95% CI: .0001, .1057; 90% CI: .0083, .0996). Therefore, Hypotheses 6b and 7b were supported, and 5b was marginally supported.

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Insert Table 15 about here  
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#### 4. *DISCUSSION*

Drawing on AET, this chapter develops and tests a theoretical model of job gratitude at work. Specifically, the analysis showed that perceived job social support and state gratitude are positively related to the level of job gratitude, supporting Hypotheses 2 and 3. Interestingly, dispositional gratitude does not show significant association with job gratitude, rejecting Hypothesis 1. Job gratitude is shown to be associated with other-rated voice behaviors and OCBO through the mechanism of intended help, consistent with Hypotheses 6a, 6b, 7a, and 7b. Intended help, however, shows an only marginally significant association with helping behaviors in regression analysis (Hypothesis 5a), and also shows marginally significant mediating effects between job gratitude and helping behaviors in bootstrapping analysis (Hypothesis 5b).

The marginally supported hypothesis (the positive association between intended help and other-rated helping behaviors), however, is not inconsistent with the literature on prosocial behaviors, which examine the differences between helping behaviors that are intended and those that are observed (e.g., Bolino, 1999; Grant & Mayer, 2009). These studies showed that employees have different motives to help others, including altruism, reputation, or impression management, as discussed in Chapter 5. While impression management motives tend to lead to relatively noticeable behaviors, such as courtesy behaviors, altruism motives often lead to less observable, more indirect behaviors to help, such as voice and issue-selling behaviors. Consistently, the results of this chapter suggest that intended help from job gratitude, based on its altruistic motives, shows a more significant association with voice behaviors and OCBO than helping behaviors. This further suggests that voice behaviors may be encouraged not only by conventional determinants such as psychological safety and leaders' openness to change (e.g., Detert & Burris, 2007), but also by other additional factors based on altruistic motives, including job gratitude.

This study is not without limitations. First, as I used the same sample as Chapter 5 for this study, this chapter also involves the same limitations in its sampling methods: participants being in their early career, from a single university, and more women than men. Given the significant relationship between age and dispositional gratitude (McCullough et al., 2004), having relatively young samples may explain the weak relationship between dispositional gratitude and job gratitude in the results. Future research should be conducted with participants from a wider range of age to examine the generalizability of the present findings.

Second, as I used the same samples as in Chapter 5, there is possible measurement error due to the daily survey conducted before measuring participants' job gratitude; reporting their daily

experience of state gratitude at work for three weeks may have influenced the level of job gratitude they reported at the end of the daily survey period. Future research should be designed to solely capture employees' job gratitude without making them overtly aware of their state gratitude at work.

Third, this chapter was based on a correlational research design, and some of the variables in the theoretical model were rated by the same persons. Thus it is possible to claim the results may involve common-method biases. For example, job social support and job gratitude were measured by the same participant, so the relationship between the two may reflect the shared variance attributed to the method. However, there were three to four weeks of lag time between the surveys that measured these variables, and the outcome variables within the model were all rated by external evaluators. Accordingly, common method biases might not severely impact the findings of this research. Supplementing studies with appropriate experimental designs or multiple external raters may help to solve this issue.

Last, I proposed several conceptual mechanisms linking job gratitude with several outcome behaviors (e.g., anthropomorphizing and identification linking job gratitude with organization-directed OCBs). Future research should empirically examine such potential mechanisms.



## CHAPTER 7. GENERAL DISCUSSION

Although recent trends in other academic disciplines and business practices have recognized the importance of gratitude, little theoretical and empirical research has been performed on the roles of gratitude in workplaces. The chapters presented in this dissertation take a step toward moving research in organizational studies forward. In Chapter 3, I differentiate state and job gratitude, defining them as 1) a situation-specific, momentary positive affective state with an immediate perception of receiving an benefit from others, and 2) an enduring positive affect toward one's job with an overall, long-term belief that one has received benefits in his/her job in general, respectively. Chapter 4 develops and validates a measure of job gratitude that reflects employees' grateful attitudes toward their job. The findings show that job gratitude is relevant to, but distinct from, existing constructs such as job satisfaction and perceived organizational support, confirming the satisfactory construct validity of the measure. This contributes to the line of work on positive deviance (e.g., Spreitzer & Sonenshein, 2004; Vadera et al., 2013) by introducing a new measure of job gratitude that captures employees' grateful attitudes toward their job beyond merely being satisfied with them or taking them for granted.

Chapter 5 and 6 develop and test theoretical models of state gratitude and job gratitude by using data from a series of surveys, including a three-week long daily survey and an other-rated survey. Chapter 5 shows that the everyday experience of responsive-receiving events increases employees' experience of state gratitude. The results also suggest that employees' experiences of state gratitude enhance their helping and in-role behaviors through the heightened desire to reciprocate benevolence, particularly when their jobs involve less extrinsic rewards and low levels of dependency. This chapter sheds light onto the affective and transient side of employee motivation that has been overlooked in current understandings of work motivation (cf., Seo et al.,

2010). Lastly, Chapter 6 supports that job social support and accumulated state gratitude are positively associated with employees' grateful attitudes toward their job (their job gratitude), and that job gratitude leads to voice behaviors and OCBO observed by others through intended help. These findings contribute to AET, as they show the significant link between state gratitude and job gratitude. Moreover, they also enrich understandings of prosocial behaviors by identifying additional consequences—voice behaviors and OCBO—of prosocial motives or intended help. Together, these findings provide important insight into the antecedents, behavioral effects, psychological mechanisms, and boundary conditions of gratitude experienced at work. However, I was not able to test the integrated model of state gratitude and job gratitude due to the relatively small size of samples for the given number of variables and the data's departure from the multivariate normality<sup>3</sup>.

With these findings, my dissertation contributes both to theory and practice. Theoretically, it contributes to both the affect literature and motivation literature. Practically, it suggests how employees may more effectively help and appreciate each other, and how managers might implement practices to influence how and when employees offer, give, and receive support in organizations. While I have alluded to these potential contributions throughout the proposal, here I detail the implications of this research. Limitations of the proposed dissertation and suggestions for future studies will follow.

## *1. THEORETICAL CONTRIBUTIONS OF THE DISSERTATION*

### **1.1. Theoretical contributions of state gratitude to the affect literature**

*Understanding discrete affect.* Although studies on affect in the field of organizational behavior have made significant contributions to understanding employees' work-related attitudes

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<sup>3</sup> Additional information including the results of Structural Equation Modeling analysis on the integrated model can be provided upon the request

and behaviors, they have been limited by focusing mostly on the basic, positive and negative, affect, rather than exploring more complex, discrete affect, such as state gratitude, admiration, disgust, and ambivalent feelings that individual employees may also experience in their work contexts.

In social psychology, affect in general has been explored and analyzed in two main frameworks: 1) dimensional and 2) discrete. According to the dimensional frame (i.e., valence and activation dimensions), as discussed in Chapter 3, affect shares two basic dimensions: the hedonic valence (i.e., pleasant-unpleasant or positive-negative) and intensity of arousal (i.e., high-low activation) (Larsen & Diener, 1992; Russell & Carroll, 1999). The combination of these two dimensions captures almost the full range of affective experience across people. This model has been widely used in management research (e.g., Barsade, 2002; Bartel & Saavedra, 2000).

The discrete affect model, however, focuses on multiple discrete affects, such as happiness, surprise, sadness, anger, and so on (Izard, 1993). Scholars have argued that such affects are unique experiential states that stem from distinct causes, regardless of the two dimensions suggested above. For example, although anger and fear fall into the same category of affect in the dimensional model, at the intersection of unpleasant/negative valence and high activation, they have proven to have different causes and different responses (e.g., Lerner & Keltner, 2001; Smith & Ellsworth, 1985).

Psychologists who adopt the discrete affect model have examined the adaptive role that each discrete affect plays in social interactions between individuals, groups, and cultures (Ekman, 1992; Keltner & Haidt, 1999; Keltner, Haidt, & Shiota, 2006). They argue that discrete affect and relevant affective words have evolved over thousands of years within social contexts, as a

critical mechanism to maintain sustainable social interactions (e.g., Izard, 1977; Keltner & Haidt, 1999). For example, anger, moral disgust, and contempt are distinguished by each other, as they are evoked by appraisals of the others' self-relevance, untrustworthiness, and incompetence, respectively (Hutcherson & Gross, 2011). Similarly, the experience of embarrassment can help to rebuild one's social standing (Keltner & Buswell, 1997). Discrete affect has independently evolved to be advantageous to people.

State gratitude, as discrete affect, may have unique antecedents and consequences in work contexts above and beyond mere positive affect, as admiration was shown to uniquely facilitate achieving socially valued skills from exemplary models (Algoe & Haidt, 2009). I proposed and showed that state gratitude facilitates not only helping behaviors, as positive affect in general does, but also in-role behaviors particularly when employees have less favorable job conditions and lower job dependency. Thus, my dissertation contributes to studies of affect in management research, which have focused on either positive or negative affect with little understanding of the unique functions of discrete affect.

***Understanding social affect.*** In addition to the emphasis on discrete affect, more and more scholars have recently recognized the social relevance of affect (see the review paper from Hareli, Rafaeli, & Parkinson, 2008a). Conventional approaches to affect have focused mostly on intrapersonal dynamics of basic affect—the changes between positive and negative affect within a person. However, recent studies distinguish a specific subset of affect, such as shame, embarrassment, admiration, and state gratitude, from other types of affect. This subset has been called *social affect*, which refers to “emotions that can only be elicited in the actual, imagined, or implied presence of other human beings” (e.g., Hareli, Rafaeli, & Parkinson, 2008b; Harris & Fiske, 2011: 128). These studies argued that social affect is dependent particularly on social

appraisals, which are designed to assess events that bear on social concerns (Manstead & Fischer, 2001).

Unlike basic affect (i.e., positive and negative), which is cross-culturally universal, early to emerge, and observed even among animals, social affect (e.g., state gratitude, admiration, or envy) is considered a uniquely human affect, acquired through the socialization into a particular society where such affect is culturally or structurally defined and labeled (e.g., Hareli et al., 2008b). It is thus more receptive to social, cultural, and structural factors than basic positive and negative affect.

Understanding social affect as distinct from positive and negative affect may matter in work contexts because they are likely to have unique communicative and practical functions (Parkinson, 1996). Nevertheless, the implications of such social affect in work contexts have not been fully investigated. Exploring the antecedents and consequences state gratitude which can be considered as a type of social affect contributes to this line of research.

***Understanding moral affect.*** Many social psychologists have explored gratitude's prosocial functions (e.g., McCullough et al., 2001), as they consider gratitude as a kind of moral affect, which refers to that which is "linked to the interests or welfare either of society as a whole or at least persons other than the judge or agent" (Haidt, 2003: 276). Despite increasing attention to moral judgment and behaviors in organizational contexts, relatively little research has been performed on the roles of moral emotions, including gratitude (cf. Gooty, Gavin, & Ashkanasy, 2009). By identifying the mechanisms—the desire to reciprocate benevolence and intended help—through which state and job gratitude influences employees' prosocial behaviors at work, my findings enlighten a particular link among moral emotions and behaviors in organizational contexts. They further show that the motivational impact of moral emotions, through the desire

to reciprocate benevolence, is weakened when motives/sanctions in another domain—extrinsic job rewards and job dependency—are available. This line of work contributes to shifting the focus in management research from self-interested norms and motives to those of morality and prosociality at work.

*Affective events theory.* As this dissertation broadens the understanding of discrete and social affect in the work context, it may also contribute to advance Affective Events Theory (Weiss & Cropanzano, 1996). Similar to the lack of attention on discrete and social affect in the field, Affective Events Theory has focused largely on the positive and negative affective reactions to everyday work-related events, not on more complicated reactions, such as everyday experiences of state gratitude.

Furthermore, my dissertation contributes to the growing literature on affective events (e.g., Dalal, Lam, Weiss, Welch, & Hulin, 2009; Rothbard & Wilk, 2011; Weiss & Cropanzano, 1996) by focusing on a new antecedent of affective experiences at work: responsiveness-receiving events at work. According to Affective Events Theory, work events play a significant role in employees' affective experiences, leading to affective reactions that, in turn, influence both work attitudes and affect-driven behaviors, such as performance (Weiss & Cropanzano, 1996). To highlight this, Rothbard, and Wilk (2011) considered customers' positive affective display and start-of-workday mood as a significant work-related event, and Scott and Barnes (2011) examined the participants' everyday surface- and deep-acting as a work-related event. Consistent with these studies, I explore the impact of responsiveness-receiving events at work on the experience of state gratitude and subsequent work-related behaviors.

## **1.2. Theoretical contributions of job gratitude to the motivation and prosocial literature**

***Understanding affective motivation.*** My dissertation also makes theoretical contributions to the literature on work motivation. Traditionally, studies of work motivation have perceived employees' work motivation as enduring, assuming 1) that motivation mostly results from one's cognitive evaluations of the work, and 2) that the stable characteristics of jobs and people are the main determinants of *enduring work motivation*. Yet few recent studies explored temporal, affective motivation, which varies not only across individuals, but also within individuals (e.g., Guay et al., 2000; Seo et al., 2010). In this vein, my dissertation challenged the cognitive and static view of work motivation by proposing an affective temporal motivation that state gratitude and job gratitude involves. Chapter 5 showed that state gratitude facilitates employees' in-role behaviors through a transient, affective motivational mechanism: the desire to reciprocate benevolence. Chapter 6 also showed that job gratitude facilitates employees' helping and voice behaviors as well as organizational citizenship behaviors directed toward an organization through another affective, but enduring motivation: intended help. These findings add to the knowledge of both emotions and motivation by identifying unique motivational mechanisms that gratitude involves, distinct from other mechanisms of general positive and negative emotions.

Moreover, my dissertation identifies job characteristics, extrinsic job conditions and job dependency, that serve as a particular context in which the impact of state gratitude at work may be more powerful. These results demonstrate that people who have favorable extrinsic job rewards showed no systematic association of their desire to reciprocate benevolence and prosocial, pro-relationship, or in-role behaviors. In contrast, those with unfavorable job rewards showed a greater positive impact of state gratitude. These findings support the competing relationship between cognitive and affective motivations that often coexist in work settings. When one has favorable extrinsic job rewards that provide abundant, cognitive, and enduring

motives, the relative effects of the desire to reciprocate benevolence, or its affective, temporal motivation, will be weakened or crowded out (Cardador & Wrzesniewski, 2015; Ryan & Deci, 2000). Accordingly, the opposite would be the case with unfavorable job rewards. Therefore, my dissertation adds to the knowledge of both emotions and job characteristics by identifying boundary conditions with which a particular positive emotion, state gratitude, has more powerful effects in work contexts, and by exploring the indirect effects of job characteristics on work motivation.

*Understanding the recipients of prosocial behaviors.* Lastly, my dissertation contributes to the line of research on prosocial behaviors by focusing specifically on recipients. Existing studies on helping behaviors heavily focus on the helpers' (i.e., those who provide a benefit) perspective, considering gratitude as a feedback to the helpers (Grant & Gino, 2010; Grant & Wrzesniewski, 2010). However, the perspective of recipients also needs to be taken into account. The same benefits or help from the same entity (e.g., supervisors, peers, and an organization) can be perceived differently by different recipients, shaping their job gratitude differently. Thus, understanding how recipients perceive and interpret the interactions, as well as attribute the given benefits, is important in order to better understand the implications of prosocial behaviors in organizations. My dissertation sheds light on the cognitive, affective, and attributive processes through which prosocial behaviors from others can impact recipients' state and job gratitude, which, in turn, influences their work-related attitudes and behaviors.

### **1.3. Theoretical contributions to gratitude research**

Finally, my dissertation contributes to the gratitude literature, particularly in social psychology, by examining the impacts of both state and job gratitude in work contexts. It provides empirical evidence to show that gratitude influences employees' work-related behaviors



in addition to other psychological, relational outcomes that existing studies have shown (e.g., Algoe & Stanton, 2012; McCullough et al., 2004). While state gratitude has been explored in existing gratitude studies, I showed its significant impact on helping and in-role behaviors, and also identified its boundary conditions (extrinsic job rewards and job dependency) under which the effects of state gratitude on these behaviors are amplified or mitigated. Also, by developing and validating a new construct—job gratitude—my dissertation enhanced the understanding of a new form of gratitude: attitudinal gratitude. Existing studies on gratitude have overlooked the object-specific and enduring nature of gratitude, despite the possibility that such a form of gratitude may have outcomes distinctive from those of transient, objectless experiences of gratitude. As expected, my findings suggest that enduring, grateful attitudes toward one’s job influence a different set of work-related behaviors—helping, OCBO, and voice behaviors—from those predicted by state gratitude.

## *2. PRACTICAL CONTRIBUTIONS*

By conceptualizing gratitude in a work context, my dissertation proposes the mechanisms in which employees appreciate, not just evaluate, their interactions and interdependence with others at work. Negative, unintended interpretations of certain interactions and exchanges at work often lead to miscommunication, misunderstanding, and conflicts in organizations. However, gratitude or grateful reactions—in both forms of state gratitude and job gratitude – can lead to positive, adaptive behaviors in organizations, such as helping behaviors, voice behaviors, and better work performance.

Thus, from a practical standpoint, my dissertation suggests that organizations and managers who seek to cultivate good citizens may benefit from highlighting altruistic, benevolent interactions within organizations, which may elicit the experience of state and job gratitude at

work. Instead of imposing only self-interested interactions at all times, organizations and managers can demonstrate their altruistic, benevolent side by showing responsiveness and support to their employees. Such actions may elicit state gratitude and enhance job gratitude from employees, thus facilitating their helping, in-role, and voice behaviors as well as OCBO. Particularly, state gratitude may play more salient roles when managers wish to encourage helping behaviors that target broader, more generalized others at work (i.e., indirect reciprocity) or those in independent work settings (i.e., less job dependency). Last, and most importantly, in cultivating an atmosphere of gratitude, workgroups and organizations might be better prepared for situations in which organizations, workgroups, or jobs cannot provide sufficient self-interested, extrinsic rewards, since gratitude and its subsequent mechanisms—the desire to reciprocate benevolence—will keep their employees motivated regardless. Indeed, a number of studies suggest that prosocial motivation and behaviors are associated with higher levels of persistence, performance, and productivity across various tasks and jobs (e.g., Grant, 2008; Korsgaard, Meglino, & Lester, 1997).

### 3. *LIMITATIONS AND FUTURE STUDIES*

First, my dissertation focuses only on the *experience* of state and job gratitude in work contexts. Future study can investigate the *expression* of such gratitude in workplaces. Existing studies of affect have distinguished felt (experienced) affect from expressed affect (Sutton, 1991). Similarly, a few gratitude studies also distinguish its affective aspects (experience) and moral aspects (expression) (McCullough et al., 2004). For example, one person may genuinely feel grateful to his supervisor without showing it, whereas another person may often say, “thank you” to her supervisor and others without genuinely meaning and feeling it. Thus, future research can examine to what extent the experience and expression of both state gratitude and job gratitude

converge or diverge in workplaces, or how the expression of gratitude influences the behaviors and performance of other individuals and work groups.

Second, the focus of my dissertation remains only at the individual level—individual employees' experience of gratitude. Affect in organizations, however, can exist in multiple levels (Ashkanasy, 2003). For example, how does the experience and expression of gratitude influence leader-member exchange at the dyadic level? Is gratitude contagious within a dyad or a team? How would organizational culture, structure, or emotional norms influence the expression and experience of gratitude in organizations? How does gratitude influence team-level or organizational-level behaviors and outcomes? In future studies, answers to such questions need to be explored, investigating the impacts of gratitude at the dyadic and collective level.

Third, my dissertation explored only a small set of outcome variables, such as helping behaviors, in-role behaviors, voice behaviors, and OCBO. However, both state and job gratitude may be related to a range of behaviors in work contexts, particularly considering their relational, altruistic, and positively deviant aspects. Future research may explore how state and job gratitude are related to, for example, employees' forgiveness behaviors (Bradfield & Aquino, 1999), compassionate behaviors (Waldman, Carmeli, & Halevi, 2011), meaningfulness of work (Kirkman et al., 2004; Lepisto & Pratt, In Press), and resilience in organizations (Youssef & Luthans, 2007).

#### 4. CONCLUDING REMARKS

*"Gratitude can transform common days into thanksgivings, turn routine jobs into joy and change ordinary opportunities into blessings." - William Arthur Ward*

Current discussions and studies on work behaviors have often been bound under the assumption of self-interest in organizational behavior and interactions. These same behaviors

that are required and incentivized in most organizational settings under the self-interested norms and rules can also be conducted and engaged in by employees with much more autonomous, affective, and altruistic motivations. My dissertation suggests that the experience of gratitude may act as a catalyst for such alternative ways of interacting in organizations.

## APPENDIX. TABLES AND FIGURES

TABLE 1. EXISTING APPROACHES TO THE CONCEPT OF GRATITUDE

		Definitions	
Gratitude as a virtue in Philosophy and Theology	Civic virtue	- Gratitude is “a civic virtue which is essential for the healthy functioning of societies.” (Smith, 1976) - Gratitude is a virtue of willingness to recognize that one has been the beneficiary of someone’s kindness.	
	Moral virtue	- Gratitude is a moral virtue of having “the capacity to experience as well as express feelings of being thankful.” (Komter, 2004) - “The virtue of gratitude is the disposition to feel grateful to the right person, for the right thing, at the right time.” (Aristotle, 1980 in Roberts, 2004)	
	Religious virtue or tradition	- “The disposition above all to feel grateful to God for the gift of his Son at all times.” (Roberts, 2004) - Gratitude has “the life-blessing properties as a virtue.” (Roberts, 2004)	
Gratitude as a social experience in Sociology	Social cohesive	- Gratitude as “an extraordinarily efficient means of social cohesion.” (Simmel, 1950) - Gratitude as “supplements of legal order ... [which] establishes the bond of interaction, of the reciprocity of service and return service, even where they are not guaranteed by external coercion.” (Simmel, 1950) - Gratitude as “Moral memory of mankind.” (Simmel, 1950)	
Gratitude as an affect in early Social Psychology	Affects	- “Gratitude is a compound emotion that arose from the admiration of a praiseworthy action (intention) and the joy experienced when that action is desirable (or valuable) to the self.” (Ortony et al., 1988) - “Gratitude is empathetic emotions from the capacity to empathize with others.” (Lazarus & Lazarus, 1994) - “Gratitude is a compound of the eliciting conditions of joy and admiration.” (O’Rorke & Ortony)	
Gratitude in the different form of an affect in recent Social Psychology	Dispositions/Traits		“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.” (McCullough et al. 2002:112)
	States	Moods	“Gratitude in the ‘intermediate terrain between affective traits and emotions’ (Rosenberg, 1998, 250).” (McCullough et al. 2004: 296)
		Emotions	- “A positive emotional reaction to the receipt of a benefit that is perceived to have resulted from the good intentions of another.” (Tsang, 2006) - “The emotion that results from an interpersonal transfer of a benefit from a beneficiary to a benefactor.” (Benefit-triggered gratitude; Lambert, Graham, & Fincham, 2009c) - “The emotion or state resulting from an awareness and appreciation of that which is valuable and meaningful to oneself.” (Generalized gratitude; Lambert, et al., 2009c)
<b>Gratitude in Organizational Behavior</b>	<b>Attitudes (My dissertation)</b>	<b>Job gratitude refers to enduring positive affect toward one’s job with an overall, long-term belief that one has received benefits in their job.</b>	

TABLE 2. OVERVIEW OF THE DISSERTATION

Affect	Gratitude	Shared definition of gratitude	Definition of each form of gratitude
<i>Dispositions/ Traits</i>	<i>Dispositional gratitude</i> : Individual differences in experiencing gratitude.	Positive affect with a perception or belief of receiving a benefit from others (Chapter 3)	A generalized tendency to (or individual differences to) recognize and respond with grateful emotion to the roles of other people’s benevolence
<i>Attitudes</i>	<i>Attitudinal gratitude</i> : Enduring gratitude  <div style="border: 1px dashed black; padding: 5px;"><i>Job gratitude</i> : Attitudinal gratitude toward one’s job (Chapter 3, 4, &amp; 6)</div>		An enduring positive affect toward something with an overall, long-term belief that one has received benefits from something.  <div style="border: 1px dashed black; padding: 5px;">An enduring positive affect toward one’s job with an overall, long-term belief that one has generally received benefits in his/her job.</div>
<i>Mood &amp; emotions</i>	<i>State gratitude</i> : Short-lived gratitude (Study 3 & 5)		A situation-specific momentary positive affective state (i.e., emotions or moods) with an immediate perception of receiving a benefit from others.

TABLE 3. RELEVANT CONSTRUCTS FOR GRATITUDE

Gratitude and relevant constructs		<b>Affective valence</b>	<b>Recognition of a benefit</b>	<b>External attribution about being benefited</b>
<b>State gratitude</b>	Positive core affect	Positive without an object	Sometimes but not always	Sometimes but not always
	Appreciation	Neutral or positive with an object	Sometimes but not always	Often but not always
	Indebtedness	Neutral or negative with an object	Often but not always	Always
<b>Job gratitude</b>	Job satisfaction	Positive toward the job	Sometimes but not always	Sometimes but not always
	Perceived organizational support	Neutral or positive toward the organization	Sometimes but not always	Always

TABLE 4. THE OVERVIEW OF ANALYSES FOR THE DEVELOPMENT AND VALIDATION OF JOB GRATITUDE MEASURE

	Item generation	Measure development		Measure validation	
		<i>Content validation</i>	<i>Dimensionality validation</i>	<i>Convergent and discriminant validity</i>	<i>Predictive validity</i>
<b>Purpose</b>	To generate an initial set of items for the job gratitude measure.	To examine if the generated items represent the meaning of job gratitude.	To validate the uni-dimensionality of job gratitude as a global construct.	To examine the extent to which job gratitude is related to, but distinct from other existing constructs.	To examine the extent to which job gratitude predicts relevant variables in the field of organizational behavior.
<b>Procedures</b>	Interviews and literature review.	A one-time survey		A two wave survey at T1 and T2 (3 weeks interval)	
<b>Samples</b> - The expected number of samples - Recruiting	- 35 full-time employees. - Snowball sampling and from alumni network.	- 23 doctoral students and faculty members in the field.	- 377 full-time employees. - Respondents who answered only the T1 survey	- 213 full-time employees who responded both to the T1 and T2 survey.	
<b>Variables</b>		1. Job gratitude. 1. Dispositional gratitude. 2. Job satisfaction. 3. Perceived organizational support.	1. The remaining 8 items of job gratitude from content validation.	1. Job gratitude (T1&T2) 2. Dispositional gratitude (T1&T2) 3. State gratitude (T1&T2) 4. Positive affective states (T1&T2) 5. State indebtedness (T1&T2) 6. Social desirability (T2) 7. Job satisfaction (T1&T2) 8. Perceived organizational support (T1)	1. In-role behaviors (T2) 2. Turnover intention (T2) 3. Organizational citizenship behaviors (T2) 5. Pro-relationship behaviors (T2)
<b>Analysis</b>	1. Open-coding of interview transcripts.	1. A content validity ratio. 2. Correct item classification rate.	1. An exploratory factor analysis.	1. Reliability of the job gratitude measure. 2. Uni-dimensionality analysis. 3. Convergent & discriminant validation. 4. Predictive validation: Hierarchical regressions	



	Item generated	Measure development		Measure validation	
		Content validation	Dimensionality validation	Convergent and discriminant validity	Predictive validity
Analysis – details and results	<p><b>1. When I think of my job, I feel a sense of gratitude.</b></p> <p><b>2. If I had to list everything that I feel grateful for about my job, it would be a very long list.</b></p> <p><b>3. I have so much to be thankful for about my job.</b></p> <p><b>4. I feel thankful for my job.</b></p> <p><b>5. I would not have been where I am today without having my job.</b></p> <p><b>6. I am grateful for the opportunity to work in my job.</b></p> <p><b>7. I feel deeply appreciative for the things others have done for me in my job.</b></p>	<p><u>1. A content validity ratio (Lawshe, 1975)</u> - CVR<sup>4</sup> has to be greater than .42 and .33 for 20 and 30 participants, respectively. <b>: dropped 5 items which have their CVR less than .42</b></p> <p><u>2. Correct item classification rate (Hinkin, 1998)</u> - An item classification standard has to be higher than 75%. <b>: dropped 1 items which has its rate less than 75%.</b></p>	<p><u>1. An exploratory factor analysis</u> - Principal axis factor analysis from Varimax rotation yields a single-factor solution. <b>: All items have a factor loading higher than .4</b></p> <p>- The amount of variance that the one-factor solution of job gratitude has to be higher than 60%. <b>: 68.73% explained.</b></p>	<p><u>1. Reliability of the job gratitude measure</u> - Cronbach’s alpha of job gratitude is higher than .7 <b>: is .928 for the Time 1 and .922 for the Time 2.</b></p> <p><u>2. Uni-dimensionality</u> - Same as the exploratory factor analysis for dimensionality validation <b>: All items have a factor loading higher than .4. : 70.93% (T1) and 69.48% (T2) of variance explained.</b></p> <p><u>3. Convergent &amp; discriminant validation</u> - Job gratitude has moderate level of correlations with other constructs (e.g., dispositional gratitude, social desirability, job satisfaction) - Paired t-test for job gratitude, dispositional gratitude, and state gratitude from Time 1 and Time 2 <b>: They show .718, .725, and .561 of test-retest reliability, respectively.</b></p> <p>- A confirmative factor analysis to compare the model having job gratitude as a distinctive factor with alternative models, in terms of fit to the data (i.e., Chi-square difference test) <b>: The model showed a significantly better fit than alternative models.</b></p> <p><u>4. Predictive validation: Hierarchical regressions</u> - <b>Job gratitude is a significant predictor of pro-relationship, helping behaviors, and turnover intention, after controlling dispositional and state gratitude, having small size effect on them<sup>5</sup>.</b></p>	

<sup>4</sup> Here,  $CVR = \frac{(n_e - \frac{N}{2})}{\frac{N}{2}}$      $n_e$  = the number of participants who identified the item as assessing job gratitude and who also rated it as 3  
 $N$  = the total number of participants

<sup>5</sup> Here,  $f^2 = \frac{R_{AB}^2 - R_A^2}{1 - R_{AB}^2}$  ( $f^2$  values of .02, .15, and .35 represent small, medium, and large effect sizes.)

$R_A^2$  = variance accounted for in the population by variable set A.

$R_{AB}^2$  = variance accounted for in the population by variable set A and B together

TABLE 5. POTENTIAL ITEMS OF JOB GRATITUDE

Item #	Items	Correct item classification	Content validity ratio (CVR)	Mean	S.D.	Skewness	Kurtosis
1	When I think of my job, I feel a sense of gratitude.	.96	.91	5.08	1.486	-.839	.571
2	If I had to list everything that I feel grateful for about my job, it would be a very long list.	.96	.91	4.89	1.691	-.717	-.221
3	I have so much to be thankful for about my job.	.91	.83	5.23	1.469	-.942	.983
4	I feel thankful for my job.	.83	.65	5.54	1.347	-1.192	1.852
5	I would not have been where I am today without having my job.	.81	.63	5.13	1.529	-.843	.295
6	I am grateful for the opportunity to work in my job.	.81	.63	5.47	1.304	-1.073	1.757
7	I feel deeply appreciative for the things others have done for me in my job.	.78	.57	5.15	1.420	-.802	.503
8	I am grateful to a wide variety of people in my job.	.74	.48				
9	Often I think, "what a privilege it is to work in my job."	.48	-.04				
10	I have benefited from having this job.	.44	-.13				
11	I feel fortunate that I get to do this job every day.	.43	-.13				
12	Many people at work have helped me get to where I am in my career today.	.26	-.48				
13	I can't help but think about all those who have supported me and helped me along the way in my career.	.00	-1.00				

TABLE 6. DESCRIPTIVE STATISTICS: THE MEASUREMENT STUDY

	$\alpha$	mean	SD	1-1	1-2	2-1	2-2	3-1	3-2	4-1	4-2	5-1	5-2	6-1	6-2	7	8	9	10	11	12
1-1. Job gratitude(T1)	.928	5.15	1.24	1																	
1-2. Job gratitude(T2)	.922	5.20	1.21	.718**	1																
2-1. State gratitude(T1)	.902	4.68	1.42	.649**	.509**	1															
2-2. State gratitude(T2)	.901	4.77	1.34	.493**	.635**	.561**	1														
3-1. State indebtedness (T1)	.708	3.22	1.14	-.001	-.086	.087	.039	1													
3-2. State indebtedness (T2)	.735	3.23	1.16	-.055	.07	.021	.181**	.451**	1												
4-1. Dispositional gratitude (T1)	.832	5.52	1.08	.464**	.363**	.442**	.376**	-.155*	-.145*	1											
4-2. Dispositional gratitude (T2)	.872	5.58	1.04	.339**	.430**	.312**	.398**	-.163*	-.178**	.725**	1										
5-1. Job satisfaction(T1)	.856	5.31	1.45	.720**	.618**	.495**	.402**	-.189**	-.248**	.347**	.309**	1									
5-2. Job satisfaction(T2)	.892	5.22	1.51	.590**	.753**	.434**	.491**	-.203**	-.195**	.303**	.376**	.775**	1								
6-1. Positive affective state (T1)	.843	4.27	1.17	.532**	.425**	.751**	.481**	.045	-.091	.340**	.247**	.475**	.458**	1							
6-2. Positive affective state (T2)	.857	4.34	1.18	.392**	.512**	.465**	.707**	-.108	-.032	.286**	.366**	.445**	.534**	.610**	1						
7. Social desirability (T2)	.772	4.63	.95	.233**	.277**	.269**	.328**	-.218**	-.244**	.354**	.400**	.257**	.274**	.200**	.351**	1					
8. Perceived organizational support (T1)	.926	4.56	1.44	.677**	.538**	.532**	.477**	-.175*	-.169*	.309**	.230**	.701**	.573**	.524**	.498**	.338**	1				
9. OCBO (T2)	.820	5.56	.89	.275**	.388**	.226**	.267**	-.284**	-.181**	.473**	.504**	.313**	.383**	.128	.263**	.383**	.226**	1			
10. Helping behaviors (T2)	.837	5.74	.95	.289**	.431**	.168*	.271**	-.244**	-.069	.453**	.464**	.239**	.328**	.135*	.282**	.384**	.202**	.785**	1		
11. In-role (T2)	.915	6.14	.99	.231**	.337**	.143*	.228**	-.238**	-.06	.391**	.447**	.243**	.307**	.062	.216**	.255**	.13	.766**	.787**	1	
12. Pro-relationship (T2)	.905	5.01	1.19	.298**	.433**	.219**	.389**	-.07	.042	.386**	.367**	.172*	.263**	.265**	.374**	.343**	.294**	.530**	.632**	.394**	1

\*\*\* p<.001, \*\* p<.01, and \* p<.05

TABLE 7. MODEL COMPARISON: THE MEASUREMENT STUDY

	CFI	RMSEA	CMIN / Δ CMIN
<i>Seven factor model</i>			
Job gratitude, state gratitude, dispositional gratitude, state indebtedness, positive affective state, job satisfaction, social desirability	.865	.069	1286.563
<hr/>			
<i>Six factor model:</i>			
Model 1 - Dispositional gratitude and job gratitude loading to the same factor	.806	.083	-288.500**
Model 2 - State gratitude and job gratitude loading to the same factor	.804	.083	-297.499**
Model 3 - Social desirability and job gratitude loading to the same factor	.793	.085	-350.125**
Model 4 - Positive affective state and job gratitude loading to the same factor	.793	.085	-349.663**
Model 5 - State indebtedness and job gratitude loading to the same factor	.802	.084	-307.650**
Model 6 - Job satisfaction and job gratitude loading to the same factor	.834	.077	-153.619**

\*\*\* p<.001, \*\* p<.01, and \* p<.05

TABLE 8. REGRESSION TABLE: THE MEASUREMENT STUDY

	<b>In-role behaviors</b>	<b>Pro-relationship behaviors</b>	<b>Turnover intention</b>	<b>OCBO</b>	<b>Helping behaviors</b>
Age	.058	.039	-.171*	.056	.023
Gender (Male)	.142*	-.041	-.027	.048	.040
Tenure	.056	-.002	-.064	.018	.082
Conscientiousness	.093	-.089	-.105	.115	.040
Extroversion	-.153*	.065	-.100	-.085	-.127*
Agreeableness	.008	.033	-.013	.069	.076
Openness to change	.089	.153*	.127 <sup>+</sup>	.023	.122 <sup>+</sup>
Neuroticism	.013	-.072	.109	-.080	-.058
Social desirability	.087	.194**	-.043	.170*	.195**
<i>Gratitude variables</i>					
Dispositional gratitude	.267**	.180*	.023	.272**	.256**
State gratitude	-.039	-.098	.062	-.015	-.144 <sup>+</sup>
Job gratitude	.099	.208*	-.427***	.053	.166*
R square	.243	.238	.305	.311	.312
Adjusted R square	.197	.192	.263	.269	.271
Cohen's f	.006	.028	.131	.003	.019

\*\*\* p<.001, \*\* p<.01, \* p<.05, and <sup>+</sup> p<.10

TABLE 9. DESCRIPTIVE STATISTICS: THE STUDY OF STATE GRATITUDE

	$\alpha$	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Age		1.78	.70	1													
2. Gender		1.70	.46	-.117	1												
3. Rank		1.30	.60	.338**	.090	1											
4. Extroversion	.74	4.39	.70	-.164	.160	.018	1										
5. Conscientiousness	.61	3.46	1.02	-.009	.153	.064	.086	1									
6. SD of positive emotions		.41	.18	.065	.073	-.074	-.002	-.159	1								
7. Positive emotions	.81	3.02	.63	-.056	.157	-.010	.123	.216*	-.090	1							
8. SD of state gratitude		.51	.27	.006	.072	-.038	-.002	-.255**	.671**	-.238**	1						
9. State gratitude	.91	3.21	.74	-.037	.211*	.055	.210*	.156	-.170*	.778**	-.241**	1					
10. Events of responsiveness-receiving	.81	3.33	.73	-.240**	.221**	-.075	.233**	.126	-.325**	.584**	-.323**	.673**	1				
11. The desire to reciprocate benevolence	.83	3.51	.72	-.071	.124	.040	.125	.102	-.255**	.407**	-.233**	.487**	.688**	1			
12. Extrinsic job rewards	.72	4.04	.83	-.106	.076	-.021	.189*	.100	-.192*	.323**	-.095	.327**	.301**	.129	1		
13. Job dependency	.83	3.84	.97	-.114	-.019	-.007	.123	.028	-.031	.231**	-.153	.127	.219*	.255**	.064	1	
14. Helping behaviors	.85	4.30	.54	-.021	.046	-.027	-.091	.114	.070	.214*	.040	.142	.228**	.128	.052	.112	1
15. In-role behaviors	.93	4.68	.48	-.048	.135	-.151	-.039	.295**	.156	.062	.057	.087	.208*	.170*	.080	.105	.500**

\*\*\*  $p < .001$ , \*\*  $p < .01$ , and \*  $p < .05$

TABLE 10. WITHIN-INDIVIDUAL ANALYSIS: THE STUDY OF STATE GRATITUDE

Dependent variable	Intercept ( $\gamma_{00}$ )	Within-individual variance ( $\rho^2$ )	Between-individual variance ( $\tau_{00}$ )	% variability within-individual
State gratitude	3.20***	.341	.498	41.0%
The desire to reciprocate benevolence	3.47***	.504	.304	37.6%

Variable	Predicting state gratitude		Predicting the desire to reciprocate benevolence	
	$B_u$	t	$B_u$	t
<i>Level 1</i>				
Events of responsiveness-receiving	.370	9.98***		
Positive affect			.23	4.36***
State gratitude			.14	3.03**
<i>Level 2</i>				
Intercept	2.71	8.74***	3.34	10.43***
Age	.014	0.14	-.050	-.49
Gender	.23	1.65	.095	.65
Rank	.056	0.47	.046	.40
Conscientiousness	.19	2.07*	.096	1.01
Extroversion	.10	1.63	.040	.62
<b>R<sup>2</sup></b>	.21		.49	

$\gamma_{00}$ = pooled intercept representing the average level of dependent variable across individuals;  $\rho^2$ = within-individual variance in the dependent variable;  $\tau_{00}$ = between-individual variance in the dependent variable. Percentage of variability within-individual was computed as  $\rho^2/(\rho^2 + \tau_{00})$

\*\*\* p<.001, \*\* p<.01, and \* p<.05

TABLE 11. REGRESSION TABLE - MEDIATING EFFECTS: THE STUDY OF STATE GRATITUDE

	Mediating effects							
	Model 1 State gratitude		Model 2 Desire to reciprocate		Model 3 Helping behaviors		Model 4 In-role behaviors	
Age	.023	.069	-.038	-.046	.015	.019	.061	.070
Gender	.087	.045	.061	.031	.020	.018	.108	.102
Rank	.050	.063	.058	.041	-.019	-.023	-.177 <sup>+</sup>	-.186 <sup>*</sup>
Trait conscientiousness	.122 <sup>*</sup>	.076	.090	.047	.102	.097	.286 <sup>*</sup>	.276 <sup>**</sup>
Trait extroversion	-.054	-.033	-.040	-.02	-.141	-.139	-.065	-.061
The number of daily responses	-.067	-.038	-.148 <sup>+</sup>	-.125	.027	.039	.015	.041
Positive affect	.750 <sup>***</sup>	.584 <sup>***</sup>	.367 <sup>***</sup>	.106	.303 <sup>*</sup>	.293 <sup>*</sup>	-.021	-.043
SD_positive affect	-.091	-.008	-.171 <sup>*</sup>	-.142	.030	.043	.188	.218 <sup>+</sup>
Events of receiving responsiveness		.319 <sup>***</sup>						
State gratitude				.349 <sup>*</sup>	-.081	-.113	.053	-.020
SD_state gratitude				.004	.026	.025	-.097	-.098
Desire to reciprocate (Daily, averaged)						.091		.210 <sup>*</sup>
R square	.645	.696	.244	.287	.084	.090	.392	.430
Adjusted R square	.623	.674	.196	.230	.010	.009	.154	.185
R square change		.051 <sup>***</sup>		.043 <sup>*</sup>		.006		.032 <sup>*</sup>
PROCESS Model (Bias corrected, covariates in model both M & Y, 95% CI)		Effect			.0231		.0525	
		Boot SE			.0367		.0394	
		Boot LLCI			-.0374		-.0013 (.0061, 90% CI)	
		Boot ULCI			.1136		.1664 (.1386, 90% CI)	

\*\*\* p<.001, \*\* p<.01, \* p<.05, and <sup>+</sup> p<.10



TABLE 12. REGRESSION TABLE - MODERATING EFFECTS: THE STUDY OF STATE GRATITUDE

			Moderating effects							
			Helping behaviors				In-role behaviors			
Age			.019	.000	.025	.016	.074	.064	.075	.069
Gender			.018	-.047	.021	.004	.102	.068	.105	.093
Rank			-.024	-.039	-.027	-.025	-.184*	-.192*	-.189*	-.188*
Trait conscientiousness			.099	.104	.091	.095	.267**	.270**	.270**	.273**
Trait extroversion			-.138	-.132	-.136	-.102	-.063	-.059	-.058	-.035
The number of daily responses			.039	.023	.045	.051	.039	.031	.047	.051
SD_positive affect			.296	.259 <sup>+</sup>	.279 <sup>+</sup>	.264 <sup>+</sup>	-.060	-.079	-.057	-.067
Positive affect			.040*	.058	.034	.048	.238*	.248*	.210 <sup>+</sup>	.220 <sup>+</sup>
SD_state gratitude			-.111	-.061	-.101	-.074	-.031	-.005	-.009	.010
State gratitude			.027	-.035	.034	.000	-.109	-.141	-.090	-.113
Desire to reciprocate (Daily, averaged)			.090	.055	.081	-.014	.216*	.198*	.201*	.134
Extrinsic job rewards			-.013	.002			.070	.078		
Desire to reciprocate x Extrinsic job rewards				-.258**				-.133		
Job dependency					.047	.053			.044	.048
Desire to reciprocate x Job dependency							-.261**			-.183*
R square			.090	.147	.091	.150	.189	.204	.187	.216
Adjusted R square			.001	.056	.003	.060	.110	.120	.108	.132
R square change				.057*		.059*		.015		.029*
PROCESS (Bias corrected, covariates in model both M & Y, 95% CI)	Low	Effect / SE	.0898/.0565		.0526/.0526		.0831/.0711		.0681/.0535	
	EJR=3.21, JD=2.87	LLCI / ULCI	.0098/.2436		-.0075/.2032		-.0217/.2689		.0022/.2243	
	Mean	Effect / SE	.0145/.0372		-.0048/.0368		.0476/.0368		.0317/.0364	
	EJR=4.04, JD=3.84	LLCI / ULCI	-.0478/.1050		-.0909/.0639		-.0031/.1475		-.0201.1305	
	High	Effect / SE	-.0607/.0634		-.0622/.0584		.0121/.0368		-.0047/.0391	
	EJR=4.87, JD=4.81	LLCI / ULCI	-.2406/.0208		-.2176/.0123		-.0555/.0973		-.0921/.0640	
		INDEX	-.0908/.0569		-.0593/.0430		-.0429/.0519		-.0376/.0304	
			-.2459/-.0120		-.1789/-.0095		-.1719/.0409		-.1251/-.0048	

\*\*\* p<.001, \*\* p<.01, \* p<.05, and <sup>+</sup> p<.10

TABLE 13. DESCRIPTIVE STATISTICS: THE STUDY OF JOB GRATITUDE

	$\alpha$	mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Age		1.78	0.70	1																
2. men		1.70	0.46	-.117	1															
3. Rank		1.30	0.60	.338**	.090	1														
4. Tenure		2.96	1.33	.381**	-.167	.285**	1													
5. Extroversion	.74	3.46	1.02	-.009	.153	.064	-.015	1												
6. Conscientiousness	.61	4.39	0.70	-.164	.160	.018	-.116	.086	1											
7. Neuroticism	.51	2.25	0.77	-.092	.138	-.090	-.123	-.033	-.204*	1										
8. Openness to change	.58	3.85	0.79	.001	-.062	-.078	.022	.098	-.070	-.111	1									
9. Agreeableness	.45	3.91	0.78	.099	.087	.044	-.068	.067	.334**	-.200*	.150	1								
10. Dispositional gratitude	.77	4.47	0.52	.001	.439**	.094	-.098	.295**	.194*	-.059	.120	.288**	1							
11. Job social support	.81	4.22	0.62	-.117	.153	-.031	-.144	.264**	.274**	-.151	.095	.139	.345**	1						
12. State gratitude (averaged)	.91	3.21	0.73	-.037	.211*	.055	-.109	.156	.210*	-.118	.119	.188*	.305**	.384**	1					
13. Job gratitude	.92	3.81	0.90	-.097	.093	.090	-.124	.063	.146	.041	-.053	.123	.206*	.322**	.363**	1				
14. Intended help	.85	3.77	0.89	-.077	.038	.068	-.073	-.050	.187*	-.052	.088	.137	.235**	.287**	.214*	.667**	1			
15. Helping behaviors	.85	4.30	0.54	-.021	.046	-.027	.049	-.091	.114	.004	.040	.062	.082	.086	.142	.129	.204*	1		
16. Voice behaviors	.81	4.00	0.59	.101	.013	.078	.075	.061	-.038	.082	.079	-.061	.108	.127	.111	.167	.204*	.647**	1	
17. Organization-directed citizenship behaviors	.86	3.95	0.61	-.093	.052	.067	.122	.072	-.017	.078	-.047	-.096	.021	.137	.195*	.193*	.177*	.600**	.718**	1

\*\*\* p<.001, \*\* p<.01, and \* p<.05

TABLE 14. REGRESSION TABLE - ANTECEDENTS: THE STUDY OF JOB GRATITUDE

	<b>Model 1</b> <b>Job gratitude</b> <b>(self-rated, Final)</b>	<b>Model 2</b> <b>Job gratitude</b> <b>(self-rated, Final)</b>
Age	-.090	-.094
Gender (Male)	-.050	-.072
Rank	.147	.132
Tenure	-.062	-.037
Extroversion	-.044	-.043
Conscientiousness	.021	.008
Neuroticism	.105	.123
Openness to change	-.075	-.090
Agreeableness	.074	.068
Dispositional gratitude	.088	.055
Job social support	.300**	.219*
State gratitude (averaged)		.274**
R square	.157	.217
Adjusted R square	.079	.137
R square change		.059**

\*\*\* p<.001, \*\* p<.01, and \* p<.05

TABLE 15. REGRESSION TABLE - CONSEQUENCES OF JOB GRATITUDE: THE STUDY OF JOB GRATITUDE

	Intended help	Helping behaviors	Voice behaviors	OCBO
<i>Control Variables</i>				
Age	-.065	.026	.126	-.132
Gender (Male)	-.022	.049	.016	.020
Rank	.102	-.062	.017	.039
Tenure	-.028	.111	.046	.178
<i>Personality</i>				
Conscientiousness	.113	.089	-.002	-.061
Extroversion	-.087	-.080	.086	.079
Agreeableness	.057	.028	-.087	-.075
Openness to change	.091	.025	.075	-.059
Neuroticism	.020	.001	.063	.004
Job gratitude	.252**	.010	-.100	.005
Intended help		.176 <sup>+</sup>	.249**	.189*
R square	.129	.065	.095	.083
Adjusted R square	.059	-.019	.014	.001
<b>PROCESS Model</b>				
(Bias corrected, covariates in model both M & Y, 95% CI)	Effect	.0363	.0543	.0430
	Boot SE	.0251	.0338	.0287
	Boot LLCI	.0001 (.0083, 90% CI)	.0072	.0067
	Boot ULCI	.1057 (.0996, 90% CI)	.1637	.1412

\*\*\* p<.001, \*\* p<.01, and \* p<.05

FIGURE 1. THE INTEGRATED MODEL OF GRATITUDE AT WORK

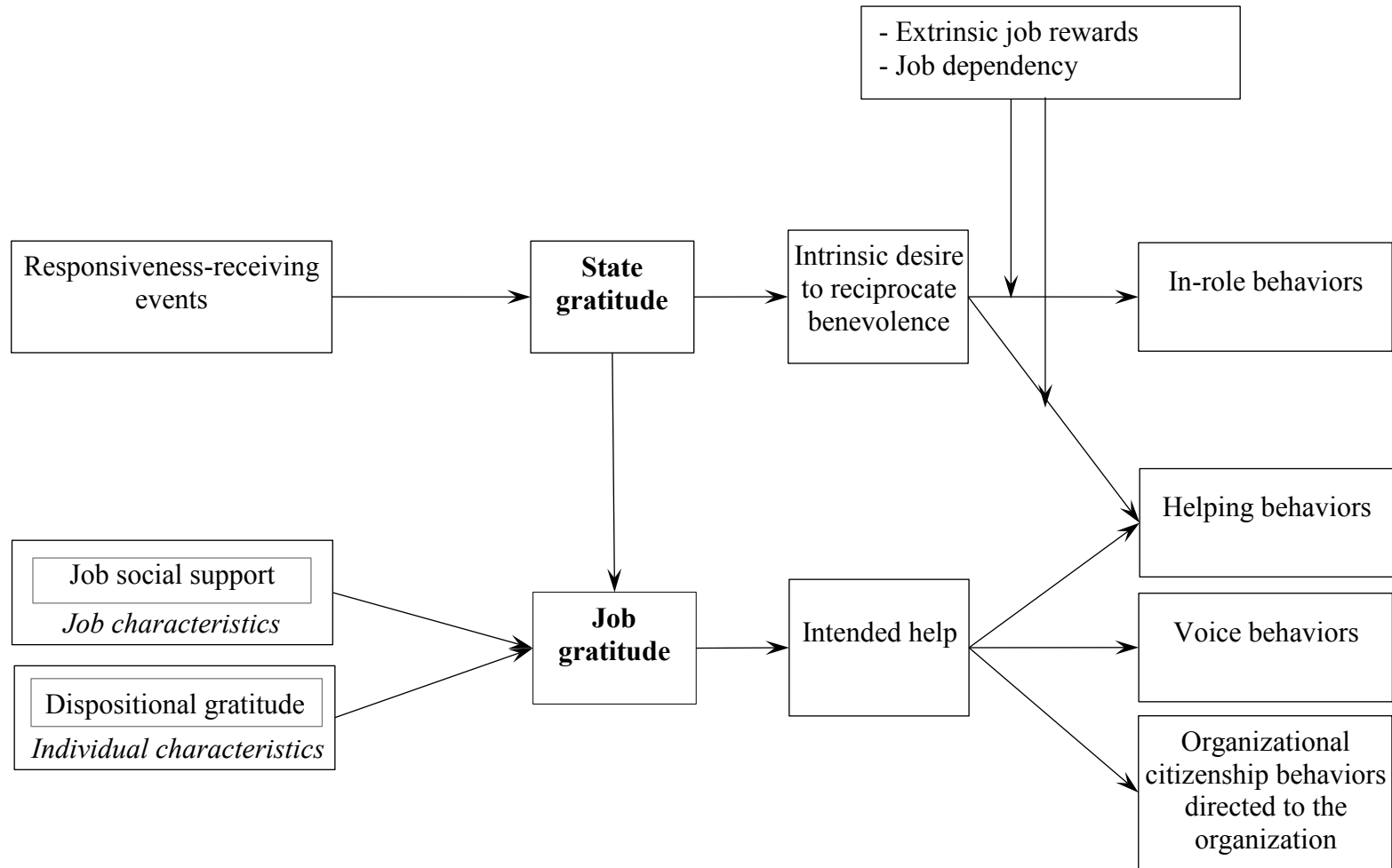


FIGURE 2. THE CORE AFFECT IN GRATITUDE

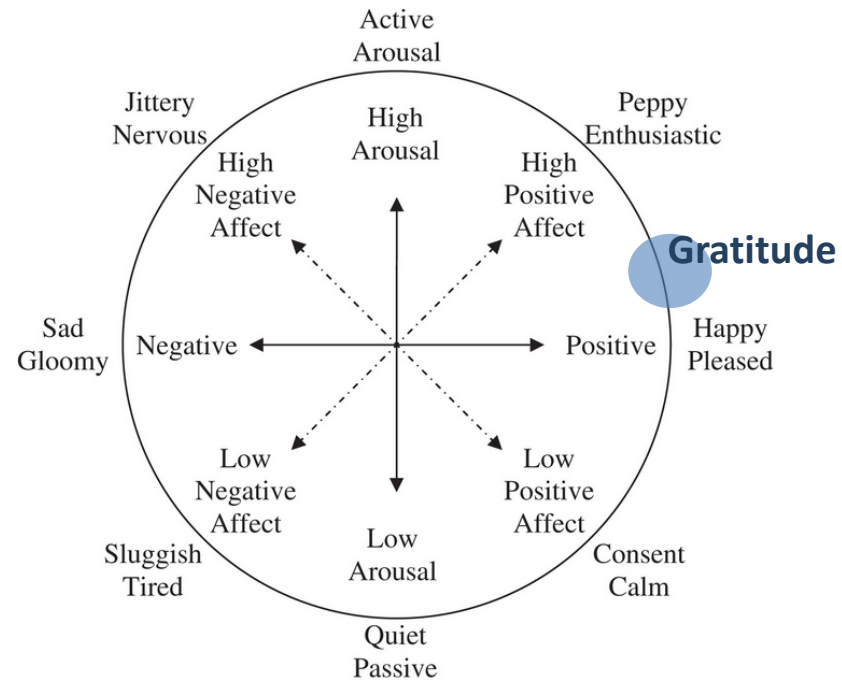
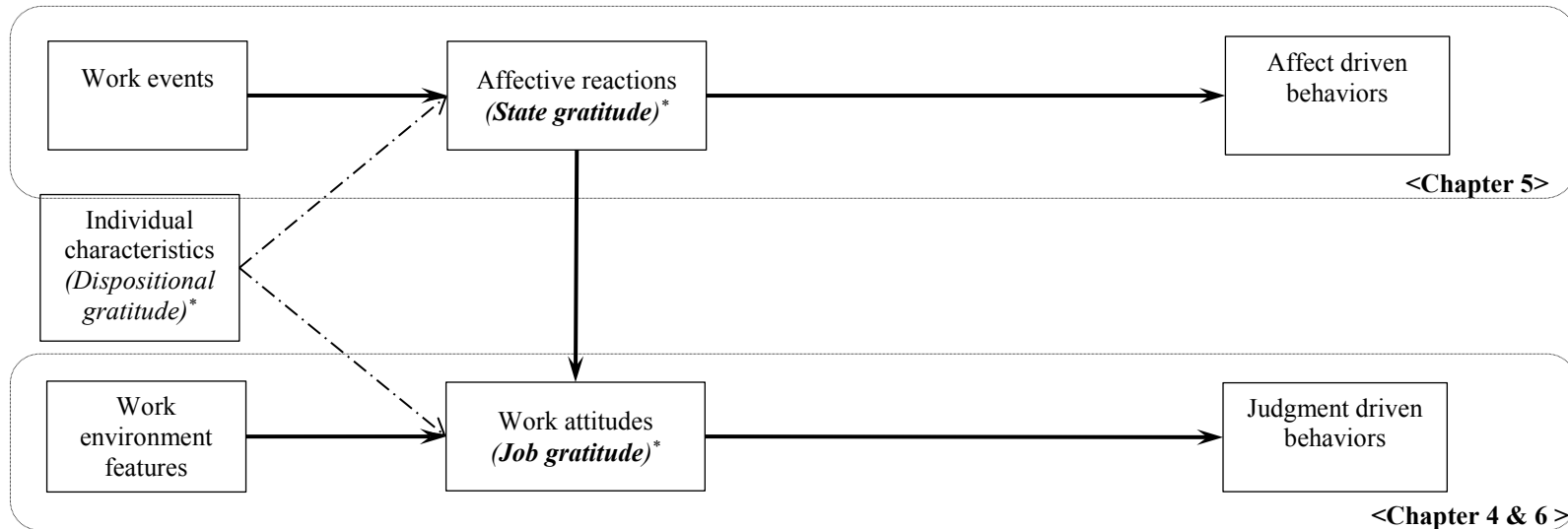


FIGURE 3. AFFECTIVE EVENTS THEORY (WEISS & CROPAZANO, 1996)



	Duration	Formation	Consequences
State gratitude	Short-lived from the time when a benefit is recognized	Elicited by a one-time, immediate stimulus or event	Influencing spontaneous behaviors
Job gratitude	Enduring as a psychological tendency	Formed over the course of time and events, influenced by accumulated memories	Influencing long-term, cognition-driven behaviors

\* The italicized words are added by me to show the relation with gratitude.

FIGURE 4. THE THEORETICAL MODEL OF STATE GRATITUDE

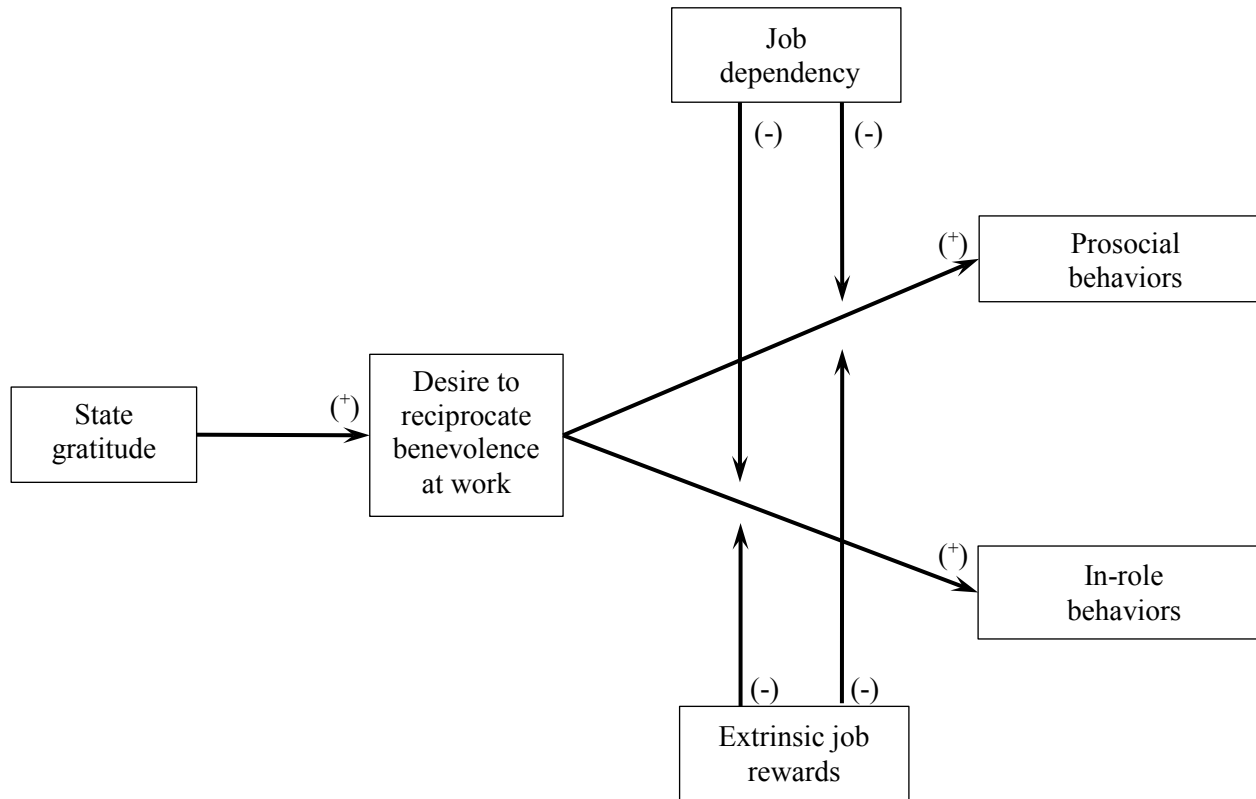




FIGURE 5. THE MODERATING EFFECTS OF EXTRINSIC JOB REWARDS AND JOB DEPENDENCY

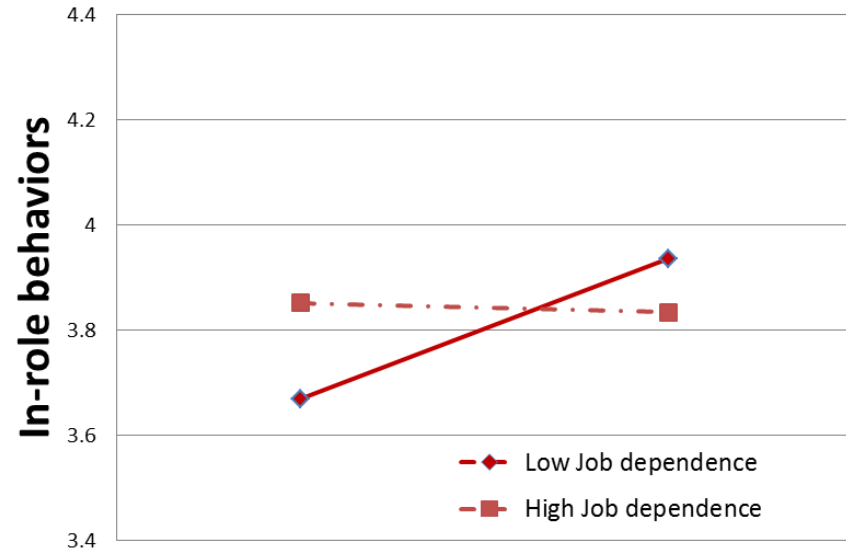
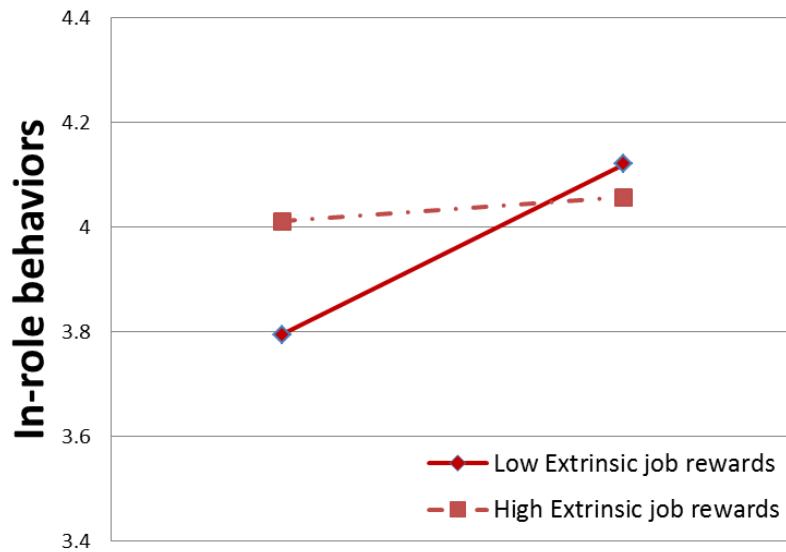
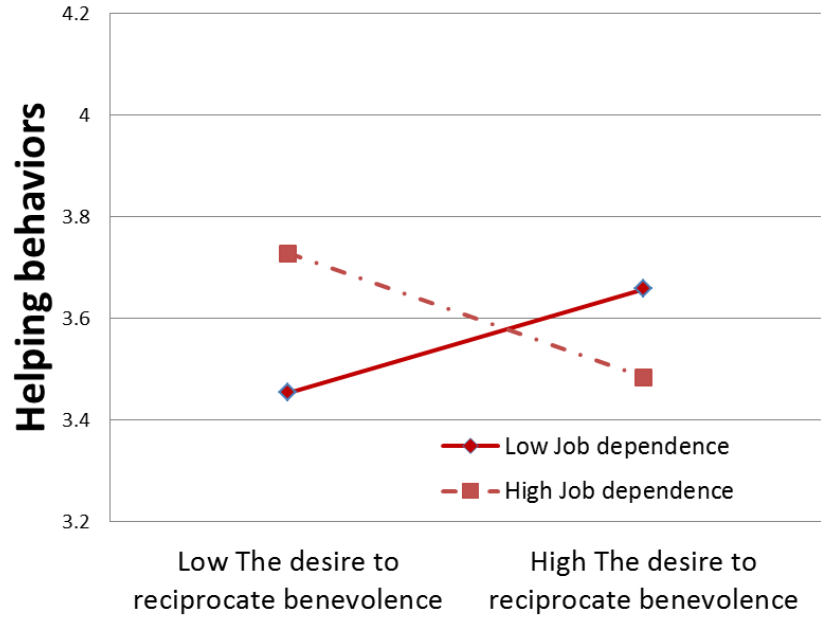
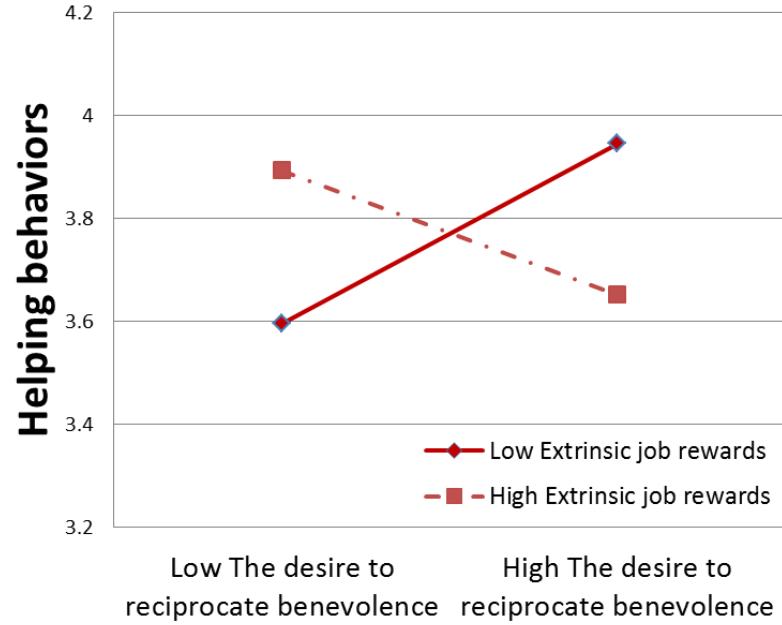
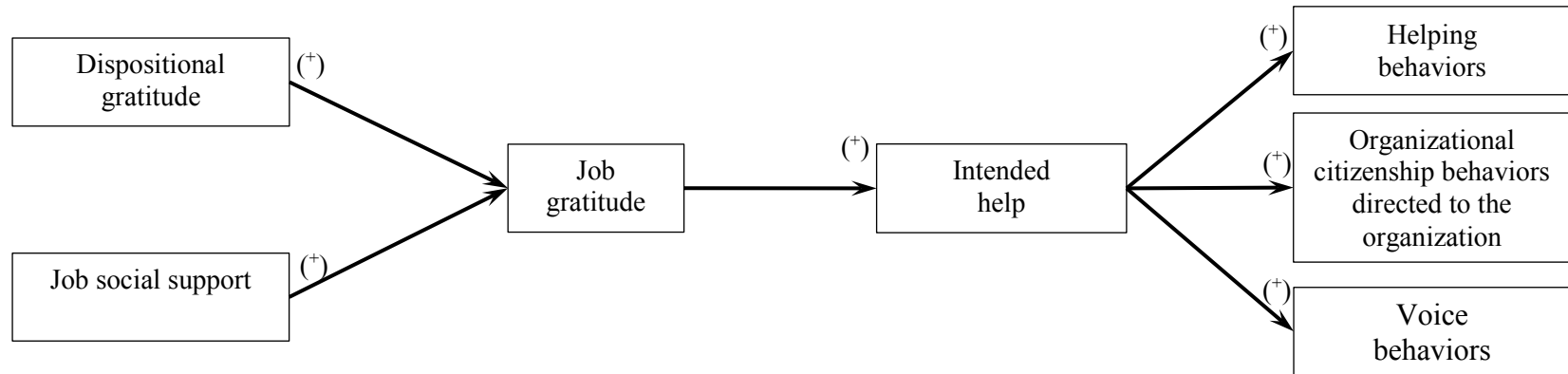


FIGURE 6. THE THEORETICAL MODEL OF JOB GRATITUDE



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