Revisiting the Nature of Transformational Leadership:

How Followers’ Affect Matters

by

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Abstract

The seven studies within this dissertation investigate the nature of transformational leadership. I consider whether transformational leadership is affective, whether it is multidimensional, and whether people perceive differences in the magnitude of transformational leadership. The first study tests the idea that the dimensions of transformational leadership have unique emotional valences. Studies 2, 3, 4, and 5 propose that followers’ ability to recognize emotion will affect their perceptions of transformational leadership; and examines whether individuals higher in emotion recognition are better able to identify and differentiate between the dimensions of transformational leadership. In Study 6, I manipulate the magnitude of transformational leadership to assess whether followers are able to perceive differences between small, medium, and large displays of transformational leadership. This study also tests whether follower emotion recognition and positive mood influence the identification of magnitude. Finally, Study 7 uses confirmatory factor analysis to test the validity of the multidimensionality of transformational leadership by examining its factor structure with followers’ emotion recognition and liking of their leader included in the model.
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Statement of Originality

I hereby certify that all of the work described within this thesis is the original work of the author.
Any published (or unpublished) ideas and/or techniques from the work of others are fully acknowledged in accordance with the standard referencing practices.

Julie Grace Weatherhead

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List of Abbreviations and Symbols

TFL = Transformational leadership
IM = Inspirational motivation
II = Idealized influence
IC = Individualized consideration
IS = Intellectual stimulation
LF = Laissez faire leadership
AS = Abusive supervision
ER = Emotion Recognition
PA = Positive affect/mood
NA = Negative affect
MLQ = Multifactor Leadership Questionnaire
ERI = Emotion Recognition Index
Chapter 1
Leadership, Emotion, and Follower Attributes: An Introduction

Leadership has been studied for centuries, and remains one of the most widely studied topics in organizational behaviour research. Over this time researchers have considered the nature of leadership, who becomes a leader, and the effects of leadership. Yet for all of our fascination with leadership, questions remain about its nature, development and outcomes. This may be especially true of transformational leadership, the most commonly studied leadership theory (Barling, 2014). The theory of transformational leadership was proposed by Bass (1985) as a set of behaviours that can transform followers. He suggested that there were four different behaviours through which leaders enacted such transformations. Over time these behaviours have been refined and are now referred to as inspirational motivation, idealized influence, individualized consideration, and intellectual stimulation. The four dimensions are presented as theoretically and conceptually separate (Bass, 1985). Despite the widespread use of the four-factor model of transformational leadership, significant issues remain. There are concerns related to construct clarity and validity, and it is debated whether transformational leadership is truly multidimensional or is instead unidimensional, representing positive leadership in general (van Knippenburg & Sitken, 2013).

One plausible reason this issue has not yet been resolved is that much of our leadership research focuses solely on the perspective of the leader, despite the inherently dyadic nature of leadership. The role of the follower is particularly important when considering how leadership behaviours are perceived, and this is fundamental to my research. A focus on follower differences within the leader-follower dyad is also consistent with a recent call to consider
different elements of followers and followership when examining leadership (e.g., Barling, 2014; Uhl-Bien, Riggio, Lowe & Carsten, 2014).

A separate issue that has been widely overlooked in transformational leadership research is the idea that transformational leadership is inherently emotional, involving the expression of emotions (Gooty, Connelly, Griffith & Gupta, 2010; van Knippenbeg & van Kleef, 2016). Within this introductory chapter, I will review the construct of transformational leadership and its criticisms, provide an overview of emotions, and then discuss how emotions, leadership, and followership all fit together. Finally I will introduce my seven dissertation studies, across which I combine the understanding that transformational leadership is emotional and that there are follower individual differences that are related to emotions, which affect followers’ perceptions of leadership. Taken together, the four studies provide a test of the construct validity of transformational leadership.

**Transformational Leadership**

The nature of transformational leadership is revealed through the definitions of the four facets of transformational leadership (Bass, 1985; Bass & Riggio, 2006). *Inspirational motivation* is characterized by leadership behaviours that encourage and support followers to perform beyond their own and others’ expectations. Leaders do this by setting challenging but achievable goals for followers, thereby building followers’ self-efficacy and resilience. Leaders exhibit *idealized influence* when they act morally and without self-interest. They discuss their values with their followers, and behave consistently with their values. *Individualized consideration* is exhibited when leaders demonstrate genuine concern for the development, needs, and feelings of their followers. Finally, *intellectual stimulation* is characterized by
behaviours that encourage followers to think for themselves, to question assumptions, and to be creative in solving problems.

Since its development, a number of scales have been developed to measure transformational leadership, including the Transformational Leadership Questionnaire (Alban-Metcalfe & Alimo-Metcalfe, 2000) and the Transformational Leadership Behavior Inventory (Podsakoff, MacKenzie & Bommer, 1996). However, the scale that has the widest use and the greatest scrutiny (Barling, 2014; Judge, Woolf, Hurst & Livingston, 2006) is the Multifactor Leadership Questionnaire (MLQ), which was developed by Bass and Avolio (1990). Originally based on a 73-item measure created by Bass (1985), the MLQ has undergone a number of revisions. The most recent, and now the most commonly used version is the MLQ 5X short, which has 20 items (Avolio, Bass, & Jung, 1999). The MLQ is administered most often to followers, who rate the frequency with which their leader exhibits the different behaviours. The MLQ 5X focuses solely on leadership behaviours (prior versions of the scale also included leadership “effects”) and includes items related to both transformational and transactional leadership.

Hundreds of studies support the individual and team-level outcomes of transformational leadership (Barling, 2014). When considered collectively, transformational leadership has been shown to relate to nearly all positive organizational behaviour constructs at both an individual and group level. At the individual level, transformational leadership is positively related to outcomes such as increased follower performance (e.g. Wang, Oh, Courtright & Colbert, 2011), follower well-being (e.g. Arnold, Turner, Barling, Kelloway & McKee, 2007), trust in the leader (e.g. Dirks & Ferrin, 2002), followers’ organizational commitment (e.g. Avolio, Zhu, Koh & Bhatia, 2004), and followers’ organizational citizenship behaviours (e.g. Wang et al., 2005). At
the group level, transformational leadership is positively related to organizational behaviour outcomes such as group cohesiveness (e.g. Jung & Sosik, 2002), group climate (e.g. Zohar & Tenne-Gazit, 2008), and team performance (e.g. Dionne, Yammarino, Atwater & Spangler, 2004).

Despite the widespread use of the four-factor model of transformational leadership, a significant issue remains with its conceptualization: Specifically, most of the research that has attempted to demonstrate the distinction between the different dimensions have shown that the four facets are highly intercorrelated when rated by either leaders or followers (correlations normally range between 0.75 - 0.9; e.g. Avolio et al., 1999; Barling, Slater & Kelloway, 2000; Bycio, Hackett & Allen, 1995; Deinert et al., 2015; Den Hartog, Van Muijen & Koopman, 1997; Judge & Piccolo, 2004). Moreover, factor analyses of the MLQ consistently show that all four dimensions load onto one factor, presenting a unidimensional model of transformational leadership. This remains true for other measures of transformational leadership (Carless, Wearing & Mann, 2000; McColl-Kennedy & Anderson, 2002; Podsakoff et al., 1996; Wang & Howell, 2010), and even for models of transformational leadership extended to other contexts, such as teaching (Beauchamp et al., 2010), pointing to the possibility that this is a conceptual rather than a measurement issue. Thus, it is still unclear whether transformational leadership is best reflected by a model with multiple distinct factors, or as a unidimensional model, encapsulating positive leadership in general.

Even Bass recognized that there was a limitation within our existing measurement, stating, “since the transformational factors are substantially intercorrelated, a single transformational factor which combines them may satisfy the needs for parsimony in some research” (Bass, 1999, p. 20). Most research examining transformational leadership does
collapse the dimensions and considers only transformational leadership as a whole (see Banks, McCauley, Gardner & Guler, 2016; Braun, Peus, Weisweiler & Frey, 2013; Effelsberg, Solga & Gurt, 2014; for recent examples). As one demonstration, 38 of the 58 articles Deinert et al. (2015) analysed in their meta-analysis studying the relationship between transformational leadership and leaders’ personality and performance used an overall measure of transformational leadership; only 13 examined the unique dimensions using the MLQ (the remaining 7 articles did not include a measure of transformational leadership). Supporting Bass’s observation, of those studies that did examine the dimensions separately, there were again high intercorrelations (all meta analytic r’s > .46) between all dimensions.

Some researchers have challenged both the four-factor and the unidimensional model of transformational leadership. Bass and his colleagues (Avolio et al., 1999; Bass & Riggio, 2006) have proposed a three-factor model in which inspirational motivation and idealized influence are combined into a single factor labelled “charisma”, and individualized consideration and intellectual stimulation remain as separate factors. Alternatively, a two-factor model of transformational leadership has been suggested, with an individual-focused transformational leadership factor (comprising individualized consideration and intellectual stimulation) and a group-focused transformational leadership factor (a combination of idealized influence and inspirational motivation; e.g. Tse & Chiu, 2014; Wu, Tsui & Kinicki, 2010). Researchers have also gone in the other direction, proposing the existence of more than four factors (e.g., Carless et al., 2000; Rafferty & Griffin, 2004). Even Avolio and colleagues have showed evidence for more than four factors, by indicating that there are two separate components to idealized influence: (1) an attributional component, and (2) a behavioural component (e.g. Antonakis, Avolio, & Sivasubramaniam, 2003). Yet many studies still support and use a unidimensional
model of transformational leadership (e.g., Carter, Armenakis, Feild & Mossholder, 2012; Epitropaki & Martin, 2013, and García-Morales, Jiménez-Barrionuevo & Gutiérrez-Gutiérrez, 2012).

Taken together, ambiguity about the appropriate factor structure underlying transformational leadership leaves open two significant issues: Either or both construct validity and measurement adequacy remain to be demonstrated. In one of the earliest and most cited critiques of the construct validity of transformational leadership, Yukl (1999) suggested that the problem lay in the vague and overlapping descriptions of the four dimensions, and the lack of any theoretical rationale for the four-factor model. He condemned the use of factor analyses and induction over theoretical development for the creation and support of a four-factor model. More recently, van Knippenberg and Sitkin (2013) agree that there are vague and overlapping descriptions of the dimensions. They go so far as to propose that we stop studying transformational leadership altogether, and ‘start over’ with a new theory of positive leadership (van Knippenberg & Sitkin, 2013).

I believe that it is premature to discard the construct of transformational leadership, and instead respond to Yukl’s (1999) challenge that what is needed is further theoretical development. In my dissertation I propose that what has been missing from any consideration of the nature of transformational leadership is its inherent emotionality, and more specifically, followers’ emotional abilities. Thus, I extend the traditional conceptualization of transformational leadership, which focuses solely on the behaviour of the leader, and propose a conceptual model in which the dimensions of transformational leadership each have unique emotional characteristics. I view transformational leadership from within a dyadic framework that emphasizes that follower attributes affect followers’ ability to (1) perceive these affective
nuances and (2) differentiate between the dimensions.

**Emotions**

To understand how leadership generally, and transformational leadership specifically, relate to emotions, it is important to first understand emotion itself. This includes both defining emotion and detailing how it has been included within leadership research. There are different theoretical perspectives on how best to define emotion, with early work in psychology conceptualizing emotion as a disruptive force that causes an “acute disturbance of the individual as a whole” (Young, 1936, p. 263). When emotions were first being considered in the context of organizations there were a number of examples of how emotions hindered, or even ruined, rational business enterprises (e.g. Brenner, 1988; Burrough & Helyar, 1990), which led to the belief that emotions were the opposite of rationality and thus needed to be controlled and minimized (Ashforth & Humphrey, 1995).

More recently, it is accepted that emotions are an inherent component of work and are often not irrational (Ashkanasy & Dorris, 2017). Salovey and Mayer (1990), who developed emotional intelligence theory, defined emotion as being “organized responses, crossing the boundaries of many psychological subsystems, including the physiological, cognitive, motivational and experiential systems” (p. 186). Emotions are discrete and often intense, occur in reaction to an event, and result in a cognitive appraisal process (Frijda, 1993). The result of the cognitive appraisal process of emotion includes thoughts, psychological changes, behavioural tendencies and expressions (Briner & Kiefer, 2005). Just as there is no one set definition of emotion there is also no set list of emotions that humans experience, however there is a group of emotions that enjoy widespread agreement, and include joy, anger, disgust, surprise, love, fear, and sadness (Ekman, 1992). Each of these discrete emotions has unique antecedents and
consequences, including tendencies to act (Barsade & Gibson, 2007).

**Emotional Intelligence.**

Within the past 20 years there has been a rapid increase in the popularity of emotional intelligence, and with that much debate over its nature and its proper measurement. Salovey and Mayer originally proposed the construct in 1990, where they described it as being “a set of skills hypothesized to contribute to the accurate appraisal and expression of emotion in oneself and in others, the effective regulation of emotion in self and others, and the use of feelings to motivate, plan, and achieve in one’s life” (p. 185). In their original paper, Salovey and Mayer conceptualized emotional intelligence as comprising three distinct but related mental processes. These were (1) appraisal and expression of emotion, (2) regulation of emotion, and (3) utilization of emotional intelligence. Over the next decade they, along with other coauthors, expanded this to four areas of skills which they refer to as the four “branches” of emotional intelligence: (1) recognizing emotion, (2) using emotion to facilitate thought, (3) understanding emotion, and (4) managing emotions in a way that enhances personal growth and social relations (Mayer, Salovey, Caruso & Sitarenios, 2001). These branches form a hierarchy, such that emotion recognition is the first step in the emotional intelligence process and emotion regulation is the last. The hierarchical nature of emotional intelligence means that the higher-order branches are dependent on the lower-order branches. Therefore in order to understand and manage emotions, one must first have the ability to perceive emotions.

Most current scholars acknowledge that emotional intelligence is a legitimate form of intelligence, however there is still debate surrounding its measurement (e.g. Ashkanasy & Daus, 2005; Zeidner, Matthews & Roberts, 2001). The central argument is whether emotional intelligence should be measured as a trait or as an ability. There are currently three common
ways in which emotional intelligence is measured: (1) as an ability using the MSCEIT (Salovey & Mayer, 1990) or other tests, (2) with self-report or peer report measures which treat emotional intelligence as an ability, and (3) with self-report or peer report measures that use an alternate definition of emotional intelligence (Ashkanasy & Humphrey, 2011). Although the second method for measuring emotional intelligence attempts to capture emotional intelligence as an ability, it provides a trait measurement. Self-report reflects individuals’ perception of their level of emotional intelligence, rather than an actual emotional intelligence score. This does not suggest that such data cannot be useful, as individuals’ perceptions of themselves often have many meaningful outcomes, and trait emotional intelligence correlates with many of the same outcomes of emotional intelligence as when it is measured as an ability (e.g. Brackett et al., 2006). However, trait emotional intelligence is not a form of intelligence but rather a self-perception (Côté, 2014). Ultimately, researchers must be careful to use the measure of emotional intelligence that fits with their conceptualization of emotional intelligence and their hypotheses.

Recently, and since the original conceptualization of my thesis, Mayer, Caruso, and Salovey (2016) have updated their theory of emotional intelligence. While they still maintain that there are four branches (perceiving, facilitating, understanding, and managing), the authors enriched the model by including more emotion related problem-solving abilities. The authors also suggest that the four branches do not exist in a strict hierarchy, however they acknowledge that recognizing emotions is still the most basic of the four branches (Mayer et al., 2016).

**Mood.**

Mood is another affective construct that involves subjective feelings, but it is distinct from emotion. Moods are less intense than emotions, have a longer duration, and are not specifically linked to one affective event (Weiss & Cropanzano, 1996). Moods tend to be
generally positive or negative, and are therefore not discrete (Barsade & Gibson, 2007).

Emotions are also distinct from trait (or dispositional) affect, which comprise personality traits that concern individuals’ innate tendencies to either experience positive or negative moods, and remain relatively stable over one’s lifetime (Barsade & Gibson, 2007). Unlike emotions, which do not follow any one system of categorization, moods and dispositional affect use a classifying system that is consensually accepted. Moods can be described on the dimensions of positive affectivity and negative affectivity (Zevon & Tellegen, 1982). Those who are high in positive affectivity are energetic, experience joy, and are generally excited by life, while those low in positive affectivity are low in energy and are listless (Weiss & Cropanzano, 1996). Thus being low in positive affectivity does not mean the presence of negative affectivity but rather the lack of positive affectivity. The same is true for negative affectivity, where those high in negative affectivity tend to be nervous, angry, and sad while those low in negative affectivity are calm and content (Weiss & Cropanzano, 1996).

**Emotions and Leadership**

Emotions have been studied in relationship to leadership in a number of ways, which can be separated into three main themes. These are (1) leader affect, follower affect and outcomes, (2) discrete emotions and leadership, and (3) emotional competencies and leadership (Gooty et al., 2010; Rajah, Song & Arvey, 2011; van Knippenberg & van Kleef, 2016).

Within the first theme most research investigates the outcomes of leaders’ affect on followers, with very little attention to the effects of followers’ emotions and moods on leader outcomes (Gooty et al., 2010). As an overview of the findings of this theme of research, leaders’ positive affect tends to have beneficial effects on followers, with leaders’ negative affect tending to have detrimental effects on followers (Bono & Ilies, 2006; Gooty et al., 2010). Leaders
behaviours, which are generally classified as being favourable or unfavourable, affect follower moods at work such that favourable behaviours lead to positive moods and unfavourable behaviours lead to negative moods (Gooty et al., 2010). Leaders with positive moods are perceived as being more effective than leaders with negative moods (Newcombe & Ashkanasy, 2002). There is also research that shows it is not universally true that leaders’ positive affective displays are more effective and beneficial than leaders’ negative affective displays, and that instead the efficacy of leaders’ emotional displays are contextually based (van Knippenberg & van Kleef, 2016). As an example, it has been shown that during creative tasks leaders’ positive affective displays are more effective, while during analytic tasks leaders’ negative affective displays were more effective (Visser, van Knippenberg, van Kleef, & Wisse, 2013).

Research conducted in the second theme investigates discrete emotions rather than moods, and so the studies manipulate or measure specific emotions of both leaders and followers. These emotions can be used as causal influences, mediators, moderators, or consequences of events. Studies that examine emotions as causal influences have mostly been experimental in nature, while research investigating emotions as the outcome have largely been based on field studies (Gooty et al., 2010). Again, the same general relationships exist, such that positive forms of leadership tend to relate to positive discrete emotions as well as increased performance, while negative forms of leadership tend to relate to negative discrete emotions and to decreased performance (e.g. McColl-Kennedy & Anderson, 2002). There are also effects on followers when they witness leaders exhibiting certain types of emotions. Lewis (2000) found that people who view sad leaders experience less positive arousal, as measured by enthusiasm, and greater low arousal, as measured by fatigue, than people who view a neutral leader. Those people also rated neutral leaders as being more effective than the sad leaders. Similar results
have been found when people rate the effectiveness of angry leaders, such that angry leaders are less effective than neutral leaders (Glomb & Hulin, 1997).

The final theme of research combining emotions and leadership focuses on leaders’ emotional capabilities, the most common of which is leaders’ emotional intelligence. Emotional intelligence positively affects performance, and leaders’ emotional intelligence positively affects both leaders’ and followers’ performance (e.g. Harms, & Credé, 2010; O’Boyle Jr., Humphrey, Pollack, Hawver & Story, 2011; Rubin, Munz, & Bommer, 2005; Sosik & Megerian, 1999). Emotional intelligence is particularly important for performance if employees’ cognitive intelligence is low, as emotional intelligence and cognitive intelligence are complementary rather than additive (Côté & Miners, 2006). This means that people can compensate for lower cognitive intelligence if they are highly emotionally intelligent, and still perform well.

**Transformational Leadership and Emotions**

There is currently no prevailing theory addressing the nature of emotions inherent in the different transformational components, although there is general agreement that emotions are an inherent component of leadership, and transformational leadership more specifically (Ashkanasy & Tse, 2000; Gooty, et al., 2010; van Knippenberg & van Kleef, 2016). Leaders’ emotional expressions influence followers’ behaviours, attitudes, affect and cognitions (Gooty et al., 2010). Research indicates that positive emotional expressions are most effective for transformational leadership (e.g. Bono & Ilies, 2006; Chi, Chung & Tsai, 2011; Rubin et al., 2005). However there is also evidence that negative emotional expressions as well as high-activation emotions can also be effective when displayed by transformational leaders, so long as the emotions match the situation (Connelly & Ruark, 2010). Emotional expressions that correspond with individual dimensions of transformational leadership have also been investigated, primarily inspirational
motivation and idealized influence (e.g. Damen, van Knippenberg, & van Knippenberg, 2008; Ilies, Curseu, Dimotakis & Spitzmuller, 2013). These transformational dimensions are typically associated with displays of positive emotions by the leader. Leaders’ emotion and arousal are transferred to followers, which in turn influence followers’ perceptions of the leadership behaviours (Damen et al., 2008). Sy, Horton, and Riggio (2018) went a step further by considering discrete emotions rather than simply positive or negative affective displays. They showed that charismatic leaders use specific emotions, such as compassion and anger, to elicit responses in their followers (Sy et al., 2018). However, there is still no research tying specific emotions or emotional valences to each of the four dimensions of transformational leadership.

**Emotions and Followership**

Knowing that leaders’ emotions matter, and that followers are as likely to experience emotion within the workplace as leaders, followers’ emotions and emotional abilities should matter too. This idea was expressed in Gooty et al.’s (2010) review of leadership and emotion, in which the authors highlighted the need for follower-centric affective research. Specific to my thesis, I propose that there are follower differences that affect followers’ ability to accurately perceive leadership behaviours. The three follower emotion-related differences that I will investigate are followers’ emotion recognition ability, followers’ liking of their leaders, and follower mood.

Research examining the effects of emotion-related individual differences in followers is rare, especially research on followers’ emotional intelligence (see Wong & Law, 2002 or Kilduff, Chiaburu & Menges, 2010 for examples of research that begins to consider followers’ emotional intelligence). Often a key element of emotional intelligence with regards to performance is emotion recognition. Emotion recognition has been shown to help people better
negotiate as they are able to recognize the nonverbal cues of their opponent and use the information against them (Elfenbein, Foo, White, Tan & Aik, 2007). Emotion recognition is also the first branch in the hierarchical model of emotional intelligence, and so individuals must first be able to recognize emotions before they can understand and manage their own or others’ emotions (Salovey & Mayer, 1990). In leader-follower dyads, I propose that followers’ ability to recognize emotion is important as it would allow followers to better perceive nuances in their leaders’ emotional expressions, which they could use as information, potentially even helping them to identify the behaviours their leaders were exhibiting. The few papers (viz Kafetsios, Nezlek & Vssiou, 2011; Wong & Law, 2002) that have considered followers’ emotional abilities support the notion that within dyadic relationships, considering only one group’s emotional intelligence is limiting.

Followers’ liking of their leader is another individual difference that would affect followers’ perceptions of their leader and their leaders’ behaviours. Liking is an affective reaction to an experience, and reflects target-specific affect. As individuals interact with one another over time, they form stable impressions of liking (or disliking) towards people, which become “general evaluative concepts of the person” (Brown & Keeping, 2005, p. 247). The reason that followers’ liking of their leaders is important is that liking can obscure followers’ ability to identify nuances within leadership behaviour. Most leadership scales, including the Multifactor Leadership Questionnaire, ask about leadership behaviours. However, when followers respond to these scales, they are not necessarily responding based solely on their direct recall of those behaviours. Instead followers make their judgments based on recall as well as pre-existing cognitive structures such as implicit theories of leadership, and affect (Hall & Lord, 1995; Martinko et al., 2018). Followers’ liking of their leaders therefore acts as a halo, such that
the followers’ overall positive feelings about their leader influence their perceptions of specific leadership behaviours (Brown & Keeping, 2005; Liden, Wayne & Stilwell, 1993).

The final individual difference variable that I will investigate is followers’ mood, which has been more widely studied than either followers’ emotional intelligence or followers’ liking of their leaders. Often followers’ mood is considered as an outcome of leadership (see Gooty et al., 2010 for a review), however some studies have conceptualized mood as a mediator or a moderator. In research examining charismatic leadership, Damen et al. (2008) showed that followers’ positive affect moderated leadership effectiveness, such that charismatic leaders’ affective displays were most effective when they matched the followers’ affective state. In a recent study investigating the daily fit between desired and received transformational leadership, follower affect mediated within-person effects of transformational leadership on both daily work attitudes and organizational citizenship behaviours (Tepper et al., 2018). Followers’ negative affect can also act as a moderator (e.g., Kant, Skogstad, Torsheim & Einarsen 2013), with followers’ trait anger moderating the relationship between leader trait anger and follower-reported petty tyranny. These studies again support the notion that follower emotion-related individual differences are critical to consider when examining followers’ perceptions of leadership.

Summary of Studies

I have developed and conducted seven studies to understand how leadership, followership, and emotions fit together. The aim of my seven studies is to test and refine the nature of transformational leadership.

**Study 1.** It has been argued that the central issue of transformational leadership is conceptual in nature, such that a sufficiently robust conceptual rationale for distinctions between
the different dimensions does not exist (Van Knippenberg & Sitkin, 2013). To address this, I provide a novel theoretical model for how the four leadership dimensions differ based on emotion. I propose that each of the four dimensions has a unique emotional valence. The term emotional valence is based on the Weiss and Cropanzano model of affect (1996), meaning that each dimension of transformational leadership is a unique combination of intensity and positivity. I test this model using three different samples, which all rate the positivity and intensity of the transformational leadership behaviours.

**Study 2-5.** A major critique of transformational leadership, stemming from its conceptual issues, is that followers are unable to distinguish between the four behavioural dimensions. One reason for this is that research has not considered relevant follower differences. One such important individual difference is followers’ emotion recognition. These four studies all use a vignette methodology, where each of the four transformational leadership dimensions are presented in separate vignettes. Across the four studies I investigate whether participants are able to identify and differentiate between the four facets of transformational leadership, and whether their skill at recognizing emotions impacts this ability.

**Study 6.** This study takes a different approach to testing the nature of transformational leadership. Rather than investigating if followers can differentiate between the four dimensions of transformational leadership, I am interested in whether followers distinguish nuances in the magnitude of transformational leadership. In order to test this I manipulate the amount and intensity of transformational leadership displayed using video vignettes, and consider the role of two follower differences. Specifically, I investigate whether (1) followers’ emotion recognition and (2) positive mood affect the likelihood followers will detect different magnitudes of transformational leadership.
Study 7. Studies 2-6 all make use of fictitious leaders to manipulate transformational leadership. My final study extends the other studies by asking followers to rate their actual leaders, and uses these ratings to analyze the factor structure of transformational leadership. As in studies 2-6, I take into account followers’ emotion recognition ability. In addition, I assess the role of followers liking of their leaders. To test the construct validity of transformational leadership I conduct a series of confirmatory factor analyses to determine the most appropriate factor structure of transformational leadership when follower emotion recognition and liking are taken into consideration. The use of a different methodology in testing the role of follower emotions helps to avoid mono-method operation bias within the dissertation.

Conclusion

The set of studies in my thesis has the potential to advance our understanding of leadership generally, as well as provides a thorough test of the validity of transformational leadership. Two core elements that leadership studies often ignore will be investigated in the studies, namely the emotionality of leadership, and followers’ affect and emotional abilities. Thus, through the seven studies in my dissertation, my goal is to provide construct clarity to one of the most frequently studied leadership theories, and advance our theoretical understanding of transformational leadership by tying in the role of emotions and relevant individual follower differences.
1.1 References


Avolio, B. J., Bass, B. M., & Jung, D. I. (1999). Re-examining the components of
transformational and transactional leadership using the Multifactor Leadership Questionnaire. *Journal of Occupational and Organizational Psychology*, 72, 441-462.


Chapter 2

Identifying Affective Characteristics of the Transformational Leadership Dimensions
2.1 Introduction

There is more research on transformational leadership than any other leadership theory (Barling, 2014), and yet serious concerns remain about its validity (van Knippenberg & Sitkin, 2013; Yukl, 1999). Although Bass and colleagues presented inspirational motivation, idealized influence, individualized consideration, and intellectual stimulation as four unique sets of behaviours (e.g. Bass, 1985; Avolio, Bass & Jung, 1999), evidence for this multidimensional structure remains elusive. Research has shown high intercorrelations between the four dimensions and confirmatory factor analyses often suggest that a one-factor model provides better fit than the suggested four-factor model (e.g. Bycio, Hackett, & Allen, 1995; Judge & Piccolo, 2004). Further support for the separate nature of dimensions would emerge if they were differentially related to different mediators and outcomes (i.e. inspirational motivation should have different outcomes than individualized consideration), thereby satisfying the criteria for predictive validity. Yet few studies have attempted to establish whether the dimensions are differentially predictive (van Knippenberg & Sitkin, 2013). Indeed most recent research using transformational leadership uses an overall measure of transformational leadership rather than examining the four dimensions separately (e.g. Hoch, Bommer, Dulebohn, & Wu, 2018; Epitropaki & Martin, 2013, Frieder, Wang & Oh, 2018).

One of the most damaging critiques of transformational leadership is that there is a lack of conceptual clarity; the argument being that there are not clear substantive differences between the definitions of the four dimensions of transformational leadership. This problem is three-fold, such that there are (1) seemingly overlapping elements between dimensions, (2) no clear inclusionary or exclusionary criteria, and (3) the definitions were not inductively generated (Yukl, 1999). When additional measurement issues are also considered, such as the most
frequently used measurement tools being unable to reproduce the theorized factor structure or establish distinctions between other aspects of leadership, van Knippenberg and Sitkin (2013) argue that transformational leadership is a fatally flawed theory and that the only appropriate response is to abandon the construct.

In response, I propose that it is too early to renounce transformational leadership. Rather than abandoning the theory, I suggest that we further develop the theory by including emotions. Leadership is inherently emotional. It involves the expression of emotions, creates emotional reactions in others, and often involves the management of leaders’ and followers’ emotions (Gooty, Connelly, Griffith & Gupta, 2010). Leaders provide emotional cues not only through clear verbal expressions but also through nonverbal communication (i.e. tone of voice, facial expressions, and body posture; Gooty et al., 2010; Sy, Côté, & Saavedra, 2005). Despite this broad understanding that leadership is emotional by nature, it is still not reflected within transformational leadership theory. There is much more research investigating the emotional reactions caused by leadership than there is research examining the affective displays that are associated with different leadership behaviours (van Knippenberg & van Kleef, 2016).

I propose that including the different emotional expressions that correspond with leadership behaviours will enhance the conceptual clarity of the construct of transformational leadership, as the emotions that correspond to leadership behaviours convey information about leaders’ feelings, intentions, and attitudes (Koning & van Kleef, 2015). This affective information should in turn enhance the accurate perceptions of leadership behaviours (Ashkanasy, 2003; George, 2000).

Prior theorizing and research has excluded the emotional valences associated with each of the four transformational leadership dimensions, emphasizing only their behavioural nature. The
purpose of this first study is to propose and test a model of the emotional valence of the four different leadership behaviours. I propose that each of the four dimensions of transformational leadership are emotional, and that there are unique emotional characteristics associated with each of the dimensions. In this study, I provide the theoretical rationale for this proposition, and hypothesize a specific emotional valence for each of the transformational leadership dimensions.

2.2 Theoretical Development

Based on Affective Events Theory (Weiss & Cropanzano, 1996), followers’ witnessing of leadership (transformational or otherwise) is an affective event that creates an emotional reaction in followers (Kuonath et al., 2017; Lanaj, Johnson, & Lee, 2016; Tepper et al., 2018). While research examining the effects of different affective states in leaders does exist, no research has specifically theorized or tested what affective displays correspond with different leadership behaviours. Generally, research has investigated the effects of interacting with leaders who are exhibiting positive affect or negative affect (e.g. Bono & Ilies, 2006; Johnson, 2009; Sy et al., 2005). A few studies have tested the effects of transformational or charismatic leaders’ positive affect on followers, invariably showing better outcomes for followers when leaders exhibit positive affect along with charismatic or transformational leadership behaviours (e.g. Bono & Ilies, 2006; Erez et al., 2008; To, Tse & Ashkanasy, 2015). Research has also examined leaders’ discrete emotions. Rather than examining leaders’ positive or negative affect, the effects of leaders’ exhibiting happiness, sadness or anger is studied (e.g. Damen, van Knippenberg & van Knippenberg, 2008a; Gino & Schweitzer, 2008; Hu & Kaplan, 2015).

There is support for the notion that leaders actively engage in deliberate displays of emotions. Humphrey, Pollack and Hawver (2008) termed this manipulation of leaders’ emotional expressions “leading with emotional labour”. Leaders engage in this form of emotional labour to
produce the emotion that will best motivate or influence followers (Humphrey et al., 2008). Leaders will often have to calculate what the best emotional response is in a given situation, and then consciously decide what emotion to display. This is not to say that transformational leadership is always a conscious process; transformational leadership can be unintentionally exhibited. Leaders also instinctively display certain emotions that in turn create emotional reactions within their followers. While Humphrey et al.’s (2008) research on leaders’ emotional labour did not specifically indicate which emotions are tied to specific leadership behaviours, their findings supported the notion that leaders’ affective displays are an integral part of leadership, and implied that different leadership behaviours could require different emotional expressions.

Tepper et al. (2018) recently examined followers’ dynamic responses to transformational leadership, including its effects on followers’ positive affect. While the main analyses used an overall measure of transformational leadership, Tepper et al. conducted supplementary analyses in which they separated the dimensions; however, findings across the four dimensions for their effects on followers’ positive affect were inconsistent. The authors suggested that this was partially because positive affect itself is also made up of a number of different positive discrete emotions, rather than a unidimensional construct. They suggested that the sub-dimensions of transformational leadership may differentially predict specific expressions of positive affect (Tepper et al., 2018), but did not test this notion directly, and focused on followers’ rather than leaders’ expressions of affect. Nonetheless, their research provides initial support for the idea that the transformational leadership dimensions are differentially emotional. This first study of my thesis constitutes an explicit attempt to conceptually model and empirically test the inherent emotiveness of the four transformational leadership dimensions.
Transformational Leadership and the Circumplex Model of Emotions

I propose that distinctions between the four transformational leadership dimensions can be made based on the circumplex model of emotions, which maps negative and positive affect. The two dimensions mapped on the circumplex model are pleasantness/unpleasantness and aroused/unaroused (or high intensity/low intensity; Weiss & Cropanzano, 1996) (see Figure 2.1). High positive affect comprises emotions that are pleasant and of high intensity, while low positive affect represents emotions that are unpleasant and of low intensity. In contrast, high negative affect reflects emotions that are unpleasant and of high intensity, while low negative affect includes emotions that are pleasant and of low intensity. It is important to note that negative affect does not solely include unfavourable emotions, nor does positive affect only include favourable emotions. The circumplex model is appropriate for my research because it maps diverse emotions.

I will consider each of the four transformational leadership dimensions separately, and propose where their respective emotional valences plot on the circumplex model, and why. Before doing so, it is important to note that in many previous studies (e.g., Avolio et al., 1999; Banks et al., 2017; Bono & Judge, 2004), inspirational motivation and idealized influence have been combined to form a separate dimension of charisma. As such, most of the theory and empirical support for the proposed emotional characteristics of inspirational motivation and idealized influence come from the literature on charismatic leadership.

In order to extrapolate from charismatic leadership research findings, inspirational motivation and idealized influence must first be conceptually distinguished. Based on Bass and colleagues’ descriptions of idealized influence and inspirational motivation, idealized influence is more strongly related to values while inspirational motivation is more related to vision. In a
2003 article, Bass, Avolio, Jung and Berson described inspirational motivation as leaders “encouraging followers to envision attractive future states, which they can ultimately envision for themselves” while idealized influence was described as leaders being “consistent in conduct with underlying ethics, principles, and values” (p. 208). Therefore I draw my theoretical inferences about inspirational motivation from the literature on charismatic leadership that is related to vision, and theoretical inferences about idealized influence from the literature on charismatic leadership that is related to values.

**Inspirational Motivation**

As a set of behaviours, inspirational motivation involves setting high expectations for followers, providing a vision of the future, and expressing optimism in achieving that future (Bass, 1985). Inspirational motivation is most often associated with pleasant and arousing emotions, both in expression by leaders and outcomes experienced by followers (see van Knippenberg & van Kleef, 2016 for a review). Bono and Ilies (2006) showed that inspiring leaders expressed more positive emotions in written vision statements than non-inspiring leaders, and that they gave more positive emotional cues in recorded speeches. In a similar study, leaders who used more facial expressions, more hand gestures, and more vocal variety when delivering a speech on their vision were rated as being more inspiring (Awamleh & Gardner, 1999), which suggests that inspirational motivation is associated with higher intensity affective displays. More recent support derives from Damen, van Knippenberg and van Knippenberg (2008b), who showed that leaders who engage in positive, high arousal emotions are more likely to be identified as inspiring than leaders who express positive, low arousal emotions. Further evidence of the affective nature of inspirational motivation, derives from Erez and colleagues. They showed that inspiring leaders encourage positive affect in followers, and that this is a result of
emotional contagion from leaders to followers (Erez et al., 2008).

A key component of inspirational motivation is communication. Leaders must communicate the high-level goals they have set, how those goals can be achieved, as well as optimism that they will be achieved. These aspects of communication are unique to inspirational motivation, and express positive and intense emotions. There is some empirical support for this idea. In a series of studies conducted by Venus, Stam, and van Knippenberg (2016), (1) leaders who expressed emotions during the communication of a vision were more effective than leaders who did not, (2) the communication of promotion visions (i.e. visions focused on potential gains) was more effective when leaders expressed enthusiasm as compared to agitation, and (3) these findings were replicated for the communication of concrete goals. These results suggest that inspirational motivation involves leaders expressing emotions and that those emotions are positive and intense. Thus, I propose that inspirational motivation should be associated with highly positive and intense emotions.

**Idealized Influence**

Idealized influence is characterized by acting as a strong ethical role model, expressing values and acting consistently with those values, and behaving ethically (Bass, 1985). One study explicitly considered how leaders’ emotional expressions are associated with idealized influence, and found support for a relationship between leaders’ emotional expressiveness and idealized influence. Ilies, Curseu, Dimotakis, and Spitzmuller (2013) found support for a relationship between leaders’ emotional expressiveness and idealized influence, such that idealized influence fully mediated the relationship between leaders’ emotional expressiveness and followers’ effort and perceptions of leadership effectiveness.

Other evidence for the emotionality of idealized influence comes from research on how
leaders promote values. Leaders encourage followers to adopt their values and ideals as their own by exhibiting positive and intense emotions (Ashkanasy & Humphrey, 2011). Indeed, value-laden messages are more effective when communicated by leaders who express emotions, particularly enthusiasm (Venus et al., 2013). Recent research by Sy, Horton and Riggio (2018) showed that leading with values involves the expression of moral emotions, such as awe and admiration, which impels followers to act. This relationship is also cyclical, as leaders who exhibit other-directed emotions are in turn more likely to act morally (Michie & Gooty, 2005).

While transformational leaders may express many different kinds of values, one specific value that is associated with idealized influence is ethicality. Once again the discrete emotions associated with moral emotions have been directly associated with ethical behaviour and ethical leadership (Eisenbeiss & van Knippenberg, 2015). Based on the emphasis within idealized influence of being other-focused, the type of moral emotions most associated with idealized influence would be other-praising emotions and other-suffering emotions (e.g. compassion; Algoe et al., 2009; Piff, Dietze, Fienberg, Stancato & Keltner, 2015). Leaders engaging in idealized influence would naturally express compassion and gratitude towards their followers, and also express admiration when ethical values are upheld. These emotions range on both positivity (as compassion requires both kindness and sadness), and intensity (admiration is more intense than gratitude). Therefore, I propose that the emotions associated with idealized influence range from being moderate to high for both positivity and intensity.

**Individualized Consideration**

The key elements of individualized consideration are paying personal attention to followers, treating followers as individuals, and providing individualized coaching (Bass, 1985). One study indirectly considered the emotionality of individualized consideration in an effort to
determine how emotionally expressive followers respond to inspirational motivation and to individualized consideration (Menges, Kilduff, Kern & Bruch, 2015). Despite being more focused on followers’ emotional expressivity, Menges et al. (2015) stated in their theoretical development that “emotion expression, both nonverbal and verbal, is an important ingredient in building and maintaining the personalized relationships that individually considerate leaders foster with their followers” (p. 629). People are more likely to share emotions in trusting relationships (Kennedy-Moore & Watson, 2001) and have a sense of familiarity, closeness and trust with leaders who exhibit individualized consideration (Zhu, Newman, Miao, & Hooke, 2013). Cumulatively, this research supports the idea that leaders display emotions when engaging in individually considerate behaviours, and so in turn that individualized consideration is emotional. However, it does not describe the nature of the emotions individually considerate leaders would exhibit.

The behavioural manifestation of individualized consideration help to reveal its emotional nature. Individualized consideration requires empathy (Harms & Credé, 2010), which involves emotional expressions such as compassion and interest. Empathy requires the sharing of emotions, which in turn forms a bond between individuals (Plutchik, 1987), and has been empirically associated with relational leadership (i.e. leadership that is considerate and sensitive to the needs of followers; Kellett, Humphrey, & Sleeth, 2006). Another aspect of individualized consideration is the enactment of respectful inquiry, a key component of active listening. While engaging in respectful inquiry, leaders use nonverbal and emotional expressions to indicate to the follower that they are actively engaged in the conversation and care about what followers are saying (Van Quaquebeke & Felps, 2016). These are more subtle emotional expressions than those associated with inspirational motivation or idealized influence, but they are still affective
Individualized consideration goes beyond empathy and active listening to include coaching and development. Leaders who exhibit individualized consideration are aware of their followers’ strengths and abilities, and encourage them to develop these skills further (Bass, 1985), and then apply those strengths. I am unaware of any published research that has examined the emotional expressions displayed by leaders engaged in coaching or mentoring, nor research that has investigated leaders’ emotional expressions during performance reviews or while giving feedback. However, I propose that both coaching and mentoring involve the use of intense emotions by the leader. The reason for this is that coaching would involve leaders expressing encouragement and enthusiasm, both relatively intense behaviours that call upon correspondingly intense emotions such as optimism, excitement, and pride. Taking the positive and intense emotions of coaching with the positive but low intensity emotions of empathy and active listening, I expect that individualized consideration will reflect moderately positive and low to moderate intensity emotions.

**Intellectual Stimulation**

Last, I posit that intellectual stimulation differs from the other three dimensions in terms of its emotional characteristic. Intellectual stimulation involves helping followers see new ways of understanding a problem, encouraging followers to think for themselves, and seeking their input when solving challenges. These behaviours are more cognitively and task-focused than the behaviours that characterize inspirational motivation, idealized influence or individualized consideration. This is supported by Bass and Avolio’s early description of intellectual stimulation as comprising behaviours that ‘stress intelligence, and emphasize rationality’ (1989, p. 511). Thus, I classify intellectual stimulation as the least emotional, and most cognitive in
nature, of the four transformational leadership dimensions. This is consistent with initial explanations by Barling, Slater and Kelloway (2000), who examined the relationship between the different dimensions of transformational leadership and emotional intelligence. While inspirational motivation, individualized consideration, and idealized influence were correlated to leader emotional intelligence, intellectual stimulation was not, and the authors postulated that this was due to intellectual stimulation being cognitively rather than emotionally-based (Barling et al., 2000).

However, I suggest that intellectual stimulation does contain some behaviours that are emotionally driven. Bass himself provided contradictory arguments as to the true nature of intellectual stimulation. Although he initially maintained that intellectual stimulation was rational (e.g. Bass 1989; Bass 1997), he later wrote that intellectual stimulation helps followers to become more innovative and creative (Bass, 1999, p. 11). Innovation and creativity are two constructs that have been previously connected with emotions; indeed creativity has been described as “an affectively-charged event”, in which affect helps to develop novel thoughts and ideas (Amabile, Barsade, Mueller & Staw, 2005, p. 367). Specifically, positive affect (more than negative affect) functions as an antecedent of creativity (Amabile et al., 2005). If affect is an antecedent of creativity, then leaders’ positive affective displays should in turn help to generate creativity in their followers. One study that investigated this idea examined the effect of leaders expressing either happiness or sadness on followers’ creativity (Visser, van Knippenberg, van Kleef & Wisse, 2015), and followers were more creative when their leader expressed happiness rather than sadness (Visser et al., 2015). At the team level, Madrid, Totterdell, Niven and Barros’ (2016) study showed that teams with an affectively positive leader were more innovative, as mediated by information sharing among team members. Thus, I propose that intellectual
stimulation should be associated with low to moderately positive and intense emotions.

**Different Emotional Characteristics**

Given that the emotions characterizing the four transformational leadership behaviours range from low to high positivity and low to high intensity, I predict that each transformational leadership dimension has a unique emotional characteristic and will plot separately on the circumplex model of emotions (Fig. 1). Thus, I hypothesize that the four dimensions should differ in their level of positivity:

*Inspirational motivation will be significantly more emotionally positive than [H1a] idealized influence, [H2a] individualized consideration, and [H3a] intellectual stimulation.*

*Idealized influence will be significantly more emotionally positive than [H4a] individualized consideration and [H5a] intellectual stimulation.*

*Individualized consideration will be significantly more emotionally positive than [H6a] intellectual stimulation.*

Similarly, I hypothesize that the dimensions should also differ in their level of intensity:

*Inspirational motivation will be significantly more emotionally intense than [H1b] idealized influence, [H2b] individualized consideration, and [H3b] intellectual stimulation.*

*Idealized influence will be significantly more emotionally intense than [H5b] individualized consideration and [H4b] intellectual stimulation.*

*Individualized consideration will be significantly more emotionally intense than [H6b] intellectual stimulation.*

These hypotheses are tested across three separate samples to enhance the robustness of any findings.

### 2.3 Study 1 - Method

**Participants**
Sample 1 consisted of 224 undergraduate commerce students who were recruited through a Canadian university’s research pool. Participants were on average 20 years of age ($M_{\text{age}} = 19.89$ years, $SD = 2.08$; 49% female).

Sample 2 participants were 187 undergraduate commerce students also recruited through a research pool. The mean age was again 20 years ($M_{\text{age}} = 19.75$ years, $SD = 1.32$; 55% female). Participants in both the first and the second sample were provided course credit according to the university’s research pool guidelines.

Sample 3 was collected through ClearVoice, a paneling service that recruits participants to complete online surveys (https://www.clearvoice.com/). Participants were required to be over 25 years of age, living in North America, and employed full time ( > 30 hours/week). 151 participants agreed to participate ($M_{\text{age}} = 45.30$ years, $SD = 10.64$; 67% female). As compensation for completing the survey, participants were paid according to ClearVoice’s guidelines. In addition, participants were entered into a draw for one of two $50 Amazon gift cards.

Procedure

The procedure for the study was similar across all three samples, with some minor variations that will be explained.

Sample 1

Students registered for the study online, but were asked to complete the survey on campus. During all sessions, students were initially provided with a link to an online survey hosted on Qualtrics, in which they were presented with the 20 transformational leadership items of Multifactor Leadership Questionnaire (MLQ) (Bass & Avolio, 1990) and four items selected from Tepper’s (2000) abusive supervision scale. Instead of asking participants to rate how well
each of the items described their leader as the scale is traditionally used, participants were asked to rate the valence of the emotions associated with each of the leadership behaviours. For each of the 24 leadership behaviours rated, participants were asked to “consider the typical emotional expressions a leader would exhibit when engaging in this behaviour. Specifically, consider how positive, negative, or neutral the emotions would be.” Thereafter, participants were asked to consider how intense the corresponding emotions would be for each of the leadership behaviours. The four abusive supervision items were included for comparison purposes.

Other elements of the survey design included, (1) randomizing the order of the MLQ items and abusive supervision items to exclude an order effect, and (2) including an attention check question (where participants were asked to respond “strongly agree”) in both sections of the survey so that participants who were not paying close attention could be removed from the dataset. Full information about the survey can be seen in Appendix A.

**Sample 2**

The same procedure was followed for Sample 2 with one exception: Specifically, Sample 2 also rated four laissez faire leadership behaviours in addition to the 20 transformational leadership behaviours and four abusive supervision behaviours from the first survey. The laissez faire leadership items were taken from the MLQ (Bass & Avolio, 1990). I included laissez faire leadership to provide leadership behaviours that should reflect very low intensity and positivity emotions (Bass, 1985), and as such serve as a contrast to the emotional positivity and intensity involved in transformational leadership and abusive supervision.

**Sample 3**

The procedure for Sample 3 varied from the first two samples, as it used a vignette design. I used vignettes to provide participants with more context and richer descriptions of the
leadership behaviours. First, participants were randomly assigned to read one of six different vignettes. All of the vignettes initially described a meeting that had taken place between a leader and a follower, as told from the point of view of the follower, as depicted below.

“You work as a midlevel brand manager for a company within the consumer goods industry. You have many responsibilities, which include dealing with customers, liaising with other brand managers, and reporting to John, the head manager of your specific product line. John is your immediate supervisor.”

Each of the vignettes then portrayed a leader exhibiting either: (1) inspirational motivation, (2) idealized influence, (3) individualized consideration, (4) intellectual stimulation, (5) abusive supervision, or (6) laissez faire leadership. These six different conditions are presented below.

Inspirational Motivation

“Despite a very busy schedule you look forward to your weekly report meeting with John because he encourages you to exceed your high-level goals, which he has worked with you to develop. He also expresses optimism about your team’s future. You are currently dealing with a challenge at work, specifically a difficult client, and in your last weekly report meeting you brought this up with John. He helped you take an optimistic approach to the situation. He showed you the opportunities that could come out of resolving the issue with the client, including how it would get you closer to achieving your team’s performance goals for that quarter. Throughout the conversation it was clear that John was positive you would find the best solution.”

Idealized Influence

“Despite a very busy schedule you look forward to your weekly report meeting with John. You can present any challenge you are facing and you have learned over time that John always tries to do the right thing, rather than just taking the easy route. He acts consistently with his personal values, which are similar to your own values and your team’s values. You are currently dealing with a challenge at work, specifically a difficult client, and in your last weekly report meeting you brought this up with John. He helped identify the ethical implications of the situation, and had you compare the different options based on their moral implications. It was clear John wanted you to do the right thing.”

Individualized Consideration

“Despite a very busy schedule you look forward to your weekly report meeting with John because he challenges you to think in new and creative ways. This allows you to perform better
in your role and finish difficult assignments, helping your team’s performance. He will also ask your opinion on any work problems the group is facing in order to get differing perspectives on the issue. You are currently dealing with a challenge at work, specifically a difficult client, and in your last weekly report meeting you brought this up with John. He had you look at the problem from an angle you had never considered before, and he also helped point out some of the assumptions you were making about the client.”

Intellectual Stimulation

“Despite a very busy schedule you look forward to your weekly report meeting with John because he spends part of the meeting catching up and asks about your life outside of work. He also takes the time to comment on the things you did well on in the past week and checks to see how you felt about your individual performance in your role. You are currently dealing with a challenge at work, specifically a difficult client, and in your last weekly report meeting you brought this up with John. He checked to make sure that the situation wasn’t becoming too stressful, and reminded you about some of your personal strengths and abilities that you could use to help resolve the issue.”

Laissez Faire

“Despite having a lot of work to do, you have scheduled weekly report meetings with John because it is mandated by the company. John will usually be late or occasionally not even show up. These meetings are never unpleasant but are neither productive nor helpful. You are currently dealing with a challenge at work, specifically a difficult client, and in your last weekly report meeting you brought this up with John. You had initially emailed him about the client, but he never responded. In the meeting he did not spend much time addressing your issue, leaving you to make the big decisions regarding the client. This is typical of John as he rarely shows an interest in your work.”

Abusive Supervision

“Despite a very busy schedule you always have scheduled weekly report meetings with John, which are sometimes satisfactory but other times John is rude and will lash out at you. You are currently dealing with a challenge at work, specifically a difficult client, and in your last weekly report meeting you brought this up with John. He started yelling at you that you hadn’t already solved the issue. He called you inept and reminded you that the client was far more important to the organization than you were. He ended the meeting by telling you to figure out the situation right away or he would take you off of the account and not allow you to come to the next team social.”

Participants were then asked to rate the positivity and intensity of the emotions they would have expected the leader to express during the meeting again using the MLQ with a sliding scale for each item (see Appendix B to see the instructions for this section).
The second part of the survey was similar to the procedure used for Samples 1 and 2 with one exception: Participants were now asked to rate the positivity and intensity of the emotional expressions that corresponded with the leadership behaviours in the vignette they had read. For example, participants who were assigned to the inspirational motivation condition were only asked to rate the positivity and intensity of the four inspirational motivation items. This would enable me to assess whether the dimensions of transformational leadership were characterized as being differentially emotionally positive or intense using a prompt that was more contextually rich.

**Measures**

The behavioural items used in the surveys were taken from two scales, the MLQ (for transformational leadership and laissez faire leadership), and Tepper’s (2000) scale of abusive supervision. I describe those scales below.

**Transformational & Laissez-Faire Leadership.** The Multifactor Questionnaire (Bass & Avolio, 1990) has 20 transformational leadership items (4 inspirational motivation, 8 idealized influence, 4 individualized consideration, and 4 intellectual stimulation), and 4 laissez-faire leadership items. The survey for Sample 1 included the 20 transformational leadership items, and the survey for Sample 2 and 3 included the 20 transformational leadership items as well as the 4 laissez faire items. As the MLQ is proprietary, a licencing agreement was purchased from Mindgarden (www.mindgarden.com), paying for the use of the scale.

**Abusive Supervision.** Four items from Teppers’ (2000) scale of abusive supervision were included in the surveys for all three samples. The items were (1) “reminds me of my past mistakes and failures”, (2) “blames me to save himself/herself embarrassment”, (3) “gives me the silent treatment”, and (4) “expresses anger at me when he/she is mad for another reason”.
Across the three samples the measurement of the positivity and intensity of emotions was consistent. I generated the scales so that the scores could be plotted on the Weiss and Cropanzano (1996) circumplex of emotion.

**Emotional Positivity.** Positivity was measured using a sliding scale. The scale ranged from -10 to +10 such that -10 represented highly negative emotions, and +10 represented highly positive emotions. The scale was labeled from negative to positive, with neutral as the midpoint. Participants could move the slider to any point on the scale, but the gridlines were all whole integers (i.e. no decimal points). A sample of the siding scale appears in Appendix B.

**Emotional Intensity.** Intensity was measured using a similar sliding scale. The scale again ranged from -10 to +10, with -10 represented very low intensity emotions and +10 represented very high intensity emotions. As an aid to participants, intensity was compared to energy, such that very low intensity emotions were said to be those that require very little energy (and vice versa). The labels for the scale were low intensity on the left hand side, medium intensity at the centre, and high intensity on the right hand side. As with positivity, participants could move the slider to any point on the scale, and the scores were all whole integers (see Appendix B).

**Data Analysis**

The first step of the analysis was to calculate a mean positivity and intensity score for each of the forms of leadership, so as to plot them on the circumplex of emotion. Thus a mean and standard deviation positivity and intensity score was calculated for all four transformational leadership dimensions, abusive supervision, and laissez faire leadership (in Samples 2 and 3), and were plotted on the circumplex model. In Samples 1 and 2, paired samples t-tests were then conducted to assess whether there were significant differences between the emotional positivity
and intensity scores across the leadership dimensions. There were a total of 12 comparisons in each sample, six for positivity and six for intensity. Using multiple t-tests capitalizes on chance, as a result of which I implemented a Bonferroni post hoc adjustment. This involves dividing the probability level ($\alpha$) by the number of tests conducted, so in this case the $\alpha$ of 0.05 was divided by 6 resulting in a probability level of 0.008.

I then used independent samples tests to see whether the positivity and intensity scores for the transformational leadership dimensions differed between the samples, as a test of consistency.

All analyses were conducted in SPSS version 24.

2.4 Results

Descriptive statistics for all three samples can be found in Table 2.1. They have also been plotted on the circumplex model in Figures 2.2, 2.3, and 2.4 (for samples 1, 2, and 3 respectively).

Sample 1

I first compared the positivity scores of the transformational leadership dimensions (see Table 2.2). The positivity score associated with inspirational motivation was significantly higher than the positivity scores of idealized influence ($t(223) = 11.476, p = 0.000$), individualized consideration ($t(223) = 8.116, p = 0.000$), and inspirational motivation ($t(223) = 11.816, p = 0.000$). This supports H1a, H2a, and H3a.

The idealized influence positivity score was significantly higher from that of intellectual stimulation ($t(223) = 5.750, p = 0.000$), but there were no differences between idealized influence and individualized consideration ($t(223) = -1.657, p = ns$). Thus H4a was rejected and H5a was supported.
Finally, the positivity associated with individualized consideration was significantly higher than the positivity score of intellectual stimulation ($t(223) = 6.802, p = 0.000$), supporting H6a.

Next I analyzed the intensity scores from Sample 1. Paired samples t-tests were again conducted to test whether the means significantly differed. All intensity scores significantly differed from one another. Inspirational motivation was more emotionally intense than idealized influence ($t(223) = 8.919, p = 0.000$), individualized consideration ($t(223) = 13.571, p = 0.000$), and intellectual stimulation ($t(223) = 15.610, p = 0.000$). This supports H1b, H2b, and H3b.

Idealized influence received significantly higher intensity scores than individualized consideration ($t(223) = 10.209, p = 0.000$), and intellectual stimulation ($t(223) = 12.057, p = 0.000$). H4b and H5b were therefore supported.

Individualized consideration was associated with more emotional intensity than intellectual stimulation ($t(223) = 2.682, p = 0.008$). Thus, H6b was supported.

Sample 2

Sample 2 served as an opportunity for replication, as a result of which the same analyses were conducted. The pattern of findings in Sample 2 replicated those of Sample 1 with one exception: there was no significant difference between the intensity of individualized consideration and intellectual stimulation ($t(186) = 1.855, p = ns$). Therefore, in this sample H4a and H6b were both rejected while all other hypotheses were supported. Table 2.2 contains the results for the comparisons of the positivity and intensity scores across dimensions for Sample 2.

Sample 3

In this sample, participants were assigned to a single leadership condition, and because they only rated the leadership items that corresponded with the vignette they read, the emotional
characteristics of the four transformational leadership dimensions were not compared. Instead, the purpose of this sample was to see if reading a vignette about a leader resulted in different emotional characteristics of the dimensions, as compared to the other two samples. The positivity and intensity scores for the dimensions from Sample 1 and Sample 2 were compared separately to those of Sample 3 using independent samples t-tests for equality of means. Results of the comparisons between the samples can be found in Table 2.3 (positivity scores) and Table 2.4 (intensity scores).

There were no significant differences between positivity or intensity scores between Sample 1 and Sample 2, which is expected as they used the same method. The positivity scores did not differ significantly across the three samples (i.e. across different methods).

There were however significant differences between the intensity scores of Sample 1 and Sample 3, such that intensity scores were higher in Sample 3 than Sample 1 (inspirational motivation ($t(246) = -2.355, p = 0.019$), idealized influence ($t(247) = -4.159, p = 0.000$), individualized consideration ($t(245) = -3.432, p = 0.001$), and intellectual stimulation ($t(246) = -2.327, p = 0.021$)). In the comparison between intensity scores of Sample 2 and Sample 3, three of the four intensity scores were again significantly higher in Sample 3 than in Sample 2 (inspirational motivation ($t(209) = -2.223, p = 0.027$), idealized influence ($t(210) = -3.597, p = 0.000$), and individualized consideration ($t(208) = -3.129, p = 0.002$)). There was no significant difference in the intensity scores of intellectual stimulation between Sample 2 and Sample 3 ($t(209) = -1.744, p = ns$).

2.5 Discussion

The findings from this study indicate that transformational leadership involves the display of emotions, and that the four transformational leadership dimensions each have a unique
emotional characteristic. The positivity and intensity scores, all of which ranged between moderate to high, differed significantly across the four behavioural dimensions. As predicted inspirational motivation was associated with the most positive and intense emotions of the four dimensions, while intellectual stimulation was the least positive and intense. These findings were consistent across samples (undergraduate students and working adults), and across different methods (rating the positivity and intensity of the transformational, abusive and laissez faire items alone vs. rating the leadership items only after reading the corresponding vignette). These findings extend the limited research that has considered whether transformational leadership is emotional, and whether the four dimensions are accompanied by unique positive or negative affective displays.

Nonetheless, while most hypotheses were supported, some were not. First, there was no significant difference between the positivity scores of idealized influence and individualized consideration in either of the first two samples. Second, there was no significant difference between individualized consideration and intellectual stimulation in terms of intensity in Sample 2. Across all three samples the dimensions ranged from being moderate to high in positivity and intensity. The conceptual similarities between dimensions seem to have resulted in the similar positivity scores between idealized influence and individualized consideration and the similar intensity scores between individualized consideration and intellectual stimulation.

It is also worth noting that the positivity and intensity scores of intellectual stimulation were higher than predicted, such that they were characterized by moderate positivity and intensity rather than low positivity and intensity. These results may be partially explained by the assumptions that followers make, such that when they see leaders making a cognitive investment
in them, they attribute positivity to these actions. The other part of the explanation is that intellectual stimulation is more emotional, and so less cognitive, than I had predicted.

**Strengths and Limitation**

There were several strengths to the study, especially in comparison to the previous research that has considered the affective nature of transformational leadership. First, I considered the emotional nature of each of the transformational leadership dimensions, rather than only considering transformational leadership as a unitary construct. Second, the emotional nature of the four components was based on Weiss and Cropanzano’s circumplex model, which facilitated the measurement of both the positivity and intensity of each of the four dimensions. This again extends previous research, which has invariably only considered whether transformational leadership is more associated with positive or negative affect (van Knippenberg & van Kleef, 2016). Finally, the use of multiple samples in the study allowed me to test the replicability of my findings. As the same pattern emerged across samples and methods, the credibility of the findings specifying the unique emotional nature of the four transformational components is enhanced.

There was one primary limitation within the study, which is that the findings may be method-bound. Participants rated the emotional nature of the items or fictitious vignettes rather than rating real leaders exhibiting the transformational behaviours. If participants had watched actual leaders exhibiting the behaviours they may have deemed their corresponding emotions as more positive and more intense than when simply reading about the behaviours. However, the problem with that method is that I would have either had to manipulate the emotional expressions of the leaders (thereby negating the whole purpose of the study), or I would have had to find enough videos of real leaders exhibiting the separate behaviours that they would be
representative of the typical emotional expressions. Therefore, while the method is limiting, it is still an appropriate test of the hypotheses. I partially mitigated this limitation with the inclusion of the vignettes in Sample 3, which provided more detail of the leadership behaviours. The use of vignettes, rather than recordings of actual leaders, ensures that emotional cues could not have primed participants. The vignettes resulted in a higher scores on intensity for all of the dimensions, and so it may be that transformational leaders would exhibit even more positive and intense emotions in real life than what I found in this study. However, the emotional distinctions between the dimensions were the central finding, and these should not change in the real world.

2.6 Conclusion

In the studies reported above, the findings across samples and methods have shown that transformational leadership is emotional; not only is it emotional, each of its four dimensions have unique emotional characteristics. People expect that leaders engaging in inspirational motivation, idealized influence, individualized consideration, and intellectual stimulation will primarily display emotions that are positive and intense, with predictable nuances in how positive and intense. These affective characteristics provide theoretical depth to the construct of transformational leadership and the conceptualization of its four behavioural dimensions.

Having isolated the unique emotional nature of the four transformational components, the following chapters report on multiple different studies in which I test whether this affective information aids followers in identifying and differentiating the four transformational leadership dimensions. I also consider several affectively-based follower differences that could impact their ability to identify and differentiate the four dimensions of transformational leadership.
2.7 References


Figure 2.1
Proposed emotional valences of the transformational leadership dimensions
Figure 2.2
Sample 1 ratings of MLQ items (N = 224)
Figure 2.3
Sample 2 ratings of MLQ items (N = 187)
**Figure 2.4**  
Sample 3 ratings of MLQ items ($N = 151$)
### Table 2.1

*Means of positivity and intensity scores for transformational leadership dimensions*

<table>
<thead>
<tr>
<th>TFL dimension</th>
<th>Positivity</th>
<th></th>
<th>Intensity</th>
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<tr>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
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<tr>
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<td>1.00</td>
<td>1.70</td>
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Table 2.2  
*Paired samples mean difference tests for Sample 2 (N = 187)*

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<td>IM vs. II</td>
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</tr>
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<td>IM vs. IC</td>
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<tr>
<td>II vs. IC</td>
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<tr>
<td>II vs. IS</td>
<td>3.798</td>
<td>0.141</td>
</tr>
<tr>
<td>IC vs. IS</td>
<td>3.427</td>
<td>0.110</td>
</tr>
</tbody>
</table>

| IM vs. II  | 7.287      | 0.381     | 0.664    | 0.000 |
| IM vs. IC  | 12.976     | 1.174     | 1.596    | 0.000 |
| IM vs. IS  | 13.161     | 1.321     | 1.786    | 0.000 |
| II vs. IC  | 10.103     | 0.694     | 1.031    | 0.000 |
| II vs. IS  | 10.648     | 0.840     | 1.221    | 0.000 |
| IC vs. IS  | 1.855      | -0.011    | 0.348    | 0.065 |
Table 2.3
Mean difference tests across samples for positivity scores (Sample 1: N = 224, Sample 2: N = 187, Sample 3: N = 151)

<table>
<thead>
<tr>
<th></th>
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<th>Sample 1 versus Sample 3</th>
<th>Sample 2 versus Sample 3</th>
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<tr>
<td></td>
<td>$t$</td>
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<td>Lower CI</td>
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Table 2.4
Mean difference tests across samples for intensity scores (Sample 1: N = 224, Sample 2: N = 187, Sample 3: N = 151)

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<th></th>
<th>Sample 1 versus Sample 3</th>
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<tbody>
<tr>
<td></td>
<td>t</td>
<td>df</td>
<td>Lower CI</td>
<td>Upper CI</td>
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Chapter 3

Testing the Multidimensional Nature of Transformational Leadership:

The Role of Follower Emotion Recognition
3.1 Introduction

Transformational leadership was originally developed as a representation of positive leadership, and defined as comprising four distinct dimensions of behaviours (Bass 1999). These behavioural dimensions are inspirational motivation, idealized influence, individualized consideration, and intellectual stimulation. Bass proposed that each of the dimensions are conceptually distinct from one another, while still reflecting the overall construct of positive leadership. Therefore, as an example, leaders can exhibit inspirational motivation without also exhibiting individualized consideration, although transformational leaders are predicted to engage in all four dimensions over time (Bass, 1999).

The multidimensionality of transformational leadership provides breadth to the theory of positive leadership. It details four sets of behaviours that leaders engage in to be effective. Indeed the multidimensional concept is so fundamental to transformational leadership that it is the basis of many leadership training programs (e.g., Kelloway & Barling, 2000). Participants in transformational leadership training are taught about the four dimensions, and are encouraged to engage in the separate behaviours with their followers once training is complete (Kelloway & Barling, 2000). The multidimensional nature of transformational leadership is also the basis for leader assessment, as evidenced by the availability of scales such as the Multifactor Leadership Questionnaire created specifically for consultants and other practitioners (e.g., www.mindgarden.com). The validity of the multidimensional conceptualization of transformational leadership also has practical implications for how industry develops, and conducts performance reviews of its leaders and is therefore of central concern for the research community.

Evidence of Multidimensionality
Despite the extent of the research on transformational leadership (see Barling 2014 for a review), the multidimensional nature of transformational leadership is still disputed (van Knippenberg & Sitkin, 2013). Early studies showed high intercorrelations between the transformational leadership dimensions (e.g. Bycio, Hackett & Allen, 1995), and this remains true more than two decades later. Indeed, following the advice set out by Yukl (2006), most recent studies of transformational leadership only consider transformational leadership as a unidimensional construct. These studies use the aggregate of the four dimensions, without reporting or analysing the four dimensions separately (recent examples include Hildenbrand, Sacramento & Binnewies, 2018; Hoch, Bommer, Dulebohn, & Wu, 2018; Lin, Scott & Matta, 2018; Tepper et al., 2018). Relatedly, other previous studies on transformational leadership fail to show that a four-factor model provides a better fit than a one-factor model using confirmatory factor analysis (e.g. Den Hartog, van Muijen & Koopman, 1997).

One possible reason why this is still an issue is that follower characteristics have not typically been considered in studies that test the nature of leadership in general, and transformational leadership more specifically. This may be an important omission, as there are growing indications that follower traits and characteristics affect leadership perceptions. A recent meta-analysis indicates that a wide array of follower differences impact followers’ ratings of leadership (Wang, van Iddekinge, Zhang, & Bishoff, 2018). In this meta-analysis, Wang et al. showed that followers’ gender, race, core self-evaluations, and especially the Big 5 personality traits influence the way followers’ rate different leadership behaviours. The authors extended these findings by showing that follower differences explain at least as much variance in follower ratings as do actual leadership behaviours.

Focusing more specifically on follower emotions, Parr, Hunter and Ligon (2013)
examined how employees diagnosed as being on the autism spectrum continuum respond to transformational leadership. They showed that employees on the autism spectrum continuum respond negatively to inspirational motivation, enough so that inspirational motivation was negatively associated with organizational commitment. At the same time, those same individuals responded positively to individualized consideration (Parr et al., 2013). The authors hypothesized that the difference in responses to the two forms of transformational leadership was a function of emotion. Specifically, the emotionally-laden (high intensity) nature of inspirational motivation could be anxiety-inducing to some followers (e.g., those on the autism spectrum continuum), while the low intensity affective behaviours associated with individualized consideration were anxiety-reducing (Parr et al., 2013). This study suggests that follower differences matter even when it comes to leadership theories that are generally considered to be universally applicable, such as transformational leadership (Bass, 1999). Parr et al.’s findings also support the idea that followers can differentiate between the transformational leadership dimensions.

There is some evidence that when presented separately, followers are able to differentiate between the transformational leadership dimensions. Kelloway and colleagues (2003) showed that followers were able to differentiate between inspirational motivation and intellectual stimulation in an online context (i.e. within an email from a leader, which contained either inspirational motivation or intellectual stimulation). This provides initial support for the notion that followers can perceive and identify the transformational leadership behaviours they experience or witness, although the authors did not consider all four of the transformational leadership dimensions. Based on Bass’s conceptualization and the findings from work such as Kelloway et al. (2003) and Parr et al. (2013), I predict that followers will be able to identify and differentiate between the four transformational leadership dimensions. Thus,
H1: Individuals are able to (a) identify inspirational motivation, and differentiate it from (b) idealized influence, (c) individualized consideration, and (d) intellectual stimulation.

H2: Individuals are able to (a) identify idealized influence, and differentiate it from (b) inspirational motivation, (c) individualized consideration, and (d) intellectual stimulation.

H3: Individuals are able to (a) identify individualized consideration, and differentiate it from (b) inspirational motivation, (c) idealized influence, and (d) intellectual stimulation.

H4: Individuals are able to (a) identify intellectual stimulation, and differentiate it from (b) inspirational motivation, (c) idealized influence, and (d) individualized consideration.

The Role of Follower Emotion Recognition

One novel component of this study is the inclusion of followers’ emotion recognition, rather than the leaders’. There is some research that has examined the effects of leaders’ emotional intelligence, including how it positively affects followers (e.g. O’Boyle Jr., Humphrey, Pollack, Hawver & Story, 2011) but there has yet to be research that considers what role followers’ emotional abilities might play in how leadership is experienced. The leader-follower relationship is a dyadic one, and as is evidenced from the meta-analysis by Wang et al. (2018), follower characteristics impact followers’ perceptions of leaders’ behaviours. While the meta-analysis provides a clear indication that follower differences matter, Wang et al. focused primarily on the follower differences of personality and gender, which could influence the way followers’ experience leadership. I propose that followers’ emotional recognition (which is a branch of emotional intelligence) will affect how they perceive leadership. Considering followers’ rather than leaders’ emotion recognition is a potential contribution both to leadership research and to the literature on emotional intelligence.

As established in Chapter 2, the four transformational leadership behaviours are inherently emotional in nature, with each dimension differentially reflecting positive and intense emotions. This means that followers perceive subtle variations in the emotions expressed along
with each of the transformational leadership behaviours, which constitute unique affective characteristics. The different leadership behaviours reflected in the four dimensions will differentially affect the intensity and positivity of the emotions the leader exhibits. As a result, these emotional expressions provide additional information that followers can use to identify the leadership they are experiencing. Therefore, the affective characteristics have two benefits.

First, and as described in Chapter 2, the affective characteristics provide an additional theoretical basis upon which to conceptually distinguish between transformational leadership beyond Bass’s original conceptualization. The emotional differences are grounded in Affective Events Theory and more specifically, the Circumplex model of emotions (Weiss & Cropanzano, 1996). Affective Events Theory posits that emotions coincide with behaviour (Weiss & Cropanzano, 1996), and these emotions range in intensity and positivity, which are mapped on the Circumplex model of emotions.

Second, these affective characteristics are important because leaders’ emotional expressions provide information to their followers. Leaders’ emotional displays affect the way followers feel, think, and act (George, 2000), but they also provide followers with information about how their leaders feel, think, and are acting (Keltner & Haidt, 1999). This can be explained by Van Kleef’s (2009) emotions and social information model, which posits that leaders’ emotions influence followers through either (1) an affective reaction pathway, or (2) a task-relevant information pathway. In the affective reaction pathway, leaders’ emotions cause an emotional reaction in followers that can then affect their behaviour. In the task-relevant information pathway, leaders’ affective displays provide information about a task, such as feedback on performance. Functionally, the pathways represent emotional contagion (affective-reaction) and cognitive interpretation (task-relevant). Both of these pathways impart information
about leaders’ behaviours and in turn shape followers perceptions of their leaders.

I propose that one way in which followers can use the information from leaders’ emotional expressions is to help them differentiate between the transformational leadership dimensions. Followers should be able to connect their leaders’ emotions to the associated behaviour. While followers can ascertain information about their leaders based on the leaders’ emotional expressions, this specific inference would require certain skills on the part of the follower. There are fine distinctions between the emotions associated with each of the four transformational leadership dimensions, and I propose that followers’ emotional intelligence, specifically their ability to accurately recognize emotions, will affect their perception of the four components of transformational leadership.

I only consider the emotion recognition branch of emotional intelligence because recognition is a critical first step in perception, and emotion recognition is the first branch in the hierarchical model of emotional intelligence (Salovey & Mayer, 1990). Not only is emotion recognition the first branch, it is also the most relevant branch of emotional intelligence for the purposes of this study: Emotion recognition is fundamentally about perceiving and deciphering emotions, and one of its key components is the ability to identify the emotions others feel and are expressing (Coté, 2014), which is of primary importance to this study. Having the ability to recognize emotions should first help followers notice the emotion their leaders are displaying, and second, help followers identify and classify those emotions; this in turn would help followers to identify the leadership behaviours they are witnessing as well as the behaviours they are not. The other three branches of emotional intelligence are (1) using emotions, (2) understanding emotions, and (3) managing emotions (Salovey & Mayer, 1990). These abilities are less directly related to followers being able to recognize and classify their leaders’ emotions, and so they
would not be directly useful in followers’ identifying and differentiating between their leaders’
transformational leadership behaviour.

I predict that because the different dimensions of transformational leadership are imbued
with different emotions, followers higher in emotion recognition will be better able to distinguish
between the four dimensions of transformational leadership. Some support for this prediction
comes from a study on followers’ moral attentiveness, which showed that followers’ moral
attentiveness impacted followers’ ratings of ethical leadership (van Gils, van Quaquebeke, & van
Dijke, 2015). Follower moral attentiveness also moderated the relationship between ethical
leadership and unethical employee behaviour, such that followers higher in moral attentiveness
paid more attention to the ethical behaviour of their leaders. Applying this idea to follower
emotion recognition and followers’ ratings of transformational leadership, I hypothesize that:

*Individuals higher, compared to those lower, in emotion recognition ability will more
accurately identify [H1e] inspirational motivation, [H2e] idealized influence, [H3e]
individualized consideration, and [H4e] intellectual stimulation.*

To test these hypotheses I conduct a series of studies. In the first two studies I test
whether followers are able to identify and differentiate the four transformational leadership
dimensions when presented with a vignette in which only one transformational leadership
dimension, with no accompanying emotional information, is described. To minimize the
possibility of mono-method bias, these two studies each use a different method of measurement.
In Study 2 (the first study of this chapter) followers are asked to pick the overall dimension that
best describes the leadership style they witnessed (a forced choice question), and in Study 3
followers rate the leader using a frequently-used transformational leadership scale. If the
hypotheses are supported, participants should be able to correctly identify the leadership
dimension they read, and should give higher scores to the behaviours portrayed in the vignette, and lower scores to the leadership behaviours they did not read.

The fourth and fifth studies (described in the following Chapter) provide a constructive replication of the two studies just described. Specifically, Studies 4 and 5 add an emotional prompt, such that information about the positivity and intensity of the emotions associated with the specific transformational leadership behaviours are included. Again two different forms of measurement are used to minimize mono-method bias. Study 4 uses the forced-choice method, and Study 5 uses the questionnaire method. Participants should again be able to identify the leadership dimension they read about, and differentiate it from the other dimensions. The emotion cues provided in these two studies should aid with both identification and differentiation.

In the studies I also investigate whether followers’ ability to recognize emotions enhances their ability to identify and differentiate the transformational leadership dimensions as hypothesized.

Across all four studies, the use of different methods, i.e., whether emotional prompts are included or not, and different ways of assessing the outcomes across the studies, provides a more robust test of my hypotheses.

3.2 Method

Below I present details about the method that is similar for all four of the studies. I then discuss the specifics of Study 2 and Study 3 separately.

Design

The four studies use a between-subject randomized experimental design with vignettes; the vignettes were constructed following the best practices suggested by Aguinis and Bradley
The primary benefits of experimental vignette methodology are high internal and construct validity. More specifically, vignettes allow researchers to manipulate and control independent variables, ensuring they are perceived to occur temporally before an effect, thereby providing high internal validity (Aguinis & Bradley, 2014). Vignettes also allow for randomization, which rules out most selection threats (Aguinis & Bradley, 2014).

In each study, I test whether the four dimensions of transformational leadership are identifiable and distinct, and whether individuals’ emotion recognition affects their ability to identify and distinguish between the elements of transformational leadership. The use of vignettes allowed me to manipulate the dimensions of transformational leadership, such that they could be presented separately, maximizing internal validity. Using an experimental research design enabled me to exclude any pre-existing impressions of the leader, as a result of which follower attributional biases are controlled. Last, careful implementation of piloting with experts on leadership enhanced construct validity.

I developed a series of vignettes to assess whether participants, who were asked to assume the role of follower, could distinguish between the different forms of transformational leadership. In total there were 6 different vignettes, one for each of the four transformational leadership dimensions, one in which all four of the dimensions were present (reflecting the full model of transformational leadership), and a control condition in which the leader exhibited laissez faire leadership behaviours (i.e. non-leadership, the control condition). In the inspirational motivation vignette, the leader was portrayed as expressing optimism in the team’s future. The leader in the idealized influence condition was described as encouraging followers to act consistently with their values. The individualized consideration vignette described the leader as discussing followers’ thoughts on their own performance and inquiring how they were feeling.
about their work. The intellectual stimulation vignette depicted the leader as challenging followers to think creatively about problems, and asking followers their thoughts on work problems. In the vignette reflecting a unidimensional model of transformational behaviour, behaviours were included from all four individual vignettes. The control condition contained information completely unrelated to leadership behaviours, as well as laissez faire leadership behaviours, such as the leader not getting involved in the work or knowing the details of projects as long as things were going well. To minimize the likelihood of unfair comparisons (Cooper & Richardson, 1986), all six vignettes were of roughly equivalent length (ranging between 187 and 206 words). The six separate vignettes are presented in Appendix C.

**Pilot studies.** Two pilot studies were conducted to ensure construct validity, i.e., that the vignettes appropriately represented the different elements of transformational leadership. In the first pilot study, seven graduate students who conduct leadership research were asked to identify the leadership dimension present in each of the six vignettes. They read each of the vignettes and then chose from a list of six options, which were (1) inspirational motivation, (2) idealized influence, (3) individualized consideration, (4) intellectual stimulation, (5) all of the above, and (6) none of the above. All seven participants accurately identified idealized influence. Six out of seven participants correctly identified inspirational motivation, intellectual stimulation, and laissez-faire leadership. For individualized consideration only five of six participants were able to identify the vignette intellectual stimulation, and only three of seven were able to correctly identify the overall transformational leadership condition.

Relevant changes were made to the individualized consideration vignette (i.e., including a sentence about the leader coaching followers) and the overall transformational leadership condition. After the changes were made, I conducted a second pilot study, this time with eleven
experts on transformational leadership (academics who have previously conducted research on transformational leadership). Participants in this pilot study read each of the six conditions. The order of the vignettes was randomized. After each vignette, participants were asked to rate the extent to which each of the four leadership dimensions and laissez-faire leadership were present (on a sliding scale from 0 to 100, where 0 represented not present and 100 represented fully present), as well as choose the dimension that best reflected the vignette. Using this forced-choice approach, participants had to choose between the options of inspirational motivation, idealized influence, individualized consideration, intellectual stimulation, laissez faire leadership, and overall transformational leadership.

All participants accurately identified the idealized influence vignette, the individualized consideration vignette, and the laissez faire vignette (11 out of 11 correct for each). For the intellectual stimulation vignette, one participant misidentified it as being the overall transformational leadership vignette, while the remaining 10 out of 11 identified it correctly. For the overall transformational leadership vignette, all but one were correct, with one participant misidentifying it as intellectual stimulation (10 out 11 correct). Finally, nine participants correctly identified inspirational motivation condition, (with one each nominating intellectual stimulation condition and transformational leadership).

As part of this second round of piloting, I also asked the experts to rate the extent to which each of the leadership dimensions were present in every vignette using a sliding scale (which ranged from 0 – not at all present to 100 – fully present). I ran paired t-tests on the data from the responses on the sliding scale to determine whether the experts could differentiate between the dimensions. I compared all of the dimensions to each other (inspirational motivation vs. idealized influence, vs. individualized consideration, vs. intellectual stimulation, vs. laissez
faire leadership, etc.).

As paired t-test analyses make use of multiple comparisons, the alpha level should be adjusted to account for the number of tests run. Therefore a Bonferroni adjustment was made, so the alpha level of 0.05 was altered to an alpha cut-off of 0.017 (0.05/3). The results of the series of paired sample t-tests indicate that the 11 experts could significantly differentiate between all of the dimensions (see Table 3.1 for full results). In the inspirational motivation condition, inspirational motivation was scored significantly higher than all of the other dimensions. The same pattern was found in the idealized influence condition, the individualized consideration condition, the intellectual stimulation condition, and the laissez-faire condition, such that the leadership dimension present in the vignette was scored significantly higher than all of the other dimensions. In addition, there were no significant differences between the overall and individual transformational leadership dimension scores, all of which were rated as significantly higher than the laissez faire score. This means that the overall condition was perceived as reflecting all four transformational leadership dimensions, as intended. Thus the vignettes accurately reflected only the specific leadership dimension, offering support for the construct validity of the experimental conditions.

3.3 Study 2

The purpose of this study is to test whether people can identify and differentiate between the four transformational leadership dimensions when provided with information about a leader’s behaviours but without information about the leader’s emotions. The study also examines whether followers’ higher in emotional recognition are better able to identify and differentiate between the transformational leadership behaviours in the absence of emotion-related information.
Method

Procedure

Participants completed an online survey hosted on Qualtrics, in which they were randomly assigned to one of the six different conditions. Each participant read only one of the vignettes. After reading their vignette, participants were first asked to rate the extent to which each of six different leadership dimensions was present in the passage using a sliding scale ranging from 0 (not at all present) to 100 (fully present). The six leadership descriptors used were “ethical” (reflecting idealized influence), “inspiring” (reflecting inspirational motivation), “relational” (reflecting individualized consideration), “stimulating” (reflecting intellectual stimulation), “passive” (reflecting laissez faire), and “abusive”. Definitions for each of the leadership descriptors were provided. These definitions can be found in Appendix D. I changed the labels to make it easier for participants to understand, and included the descriptor ‘abusive’ as a filler that was unrelated to any of the dimensions. The purpose of the sliding scale items was to test whether the dimensions could be differentiated. Differentiation would be indicated by participants giving a significantly higher score to the leadership style that was present in the vignette they read than any of the other styles.

Participants were then asked to select the leadership style that best represented the leadership behaviour in the passage they had read from a list that included all six leadership types. This tested participants’ ability to identify the dimension. Accurate identification of the dimension would be indicated by participants selecting the dimension that corresponded with the vignette they read.

Finally, participants completed the emotion recognition ability test. This was embedded into the online Qualtrics survey.
Participants

Participants were recruited using the online data collection service ClearVoice (http://clearvoiceresearch.com) and were required to be at least 25 years of age and employed full time. 238 respondents agreed to participate¹, providing approximately 40 participants per condition (inspirational motivation $n = 41$, idealized influence $n = 33$, individualized consideration $n = 41$, intellectual stimulation $n = 38$, overall $n = 46$, and control $n = 39$).

Participants’ mean age was 47.46 years ($SD = 10.59$) and 56% of the participants were female.

Measures

Transformational Leadership – Forced Choice The forced choice item presented the six leadership forms: ethical, inspirational, relational, stimulating, passive and abusive, and had participants pick the one leadership dimension that they thought was most representative of the leadership behaviours described in the vignette they read. See Appendix D to see how this item is structured.

Transformational Leadership – Sliding Scale The sliding scales measured the extent to which participants believed the fictional leader engaged in each of the six leadership forms (ethical, inspirational, relational, stimulating, passive and abusive) on a range from 0 (not at all present) to 100 (fully present). Appendix D also includes the actual sliding scale from the survey.

¹ 576 participants completed the first portion of the survey but 175 participants did not start the Emotion Recognition Index, 157 participants did not complete the Emotion Recognition Index, and 6 participants had a score lower than 17 in either the facial or vocal portion of the Emotion Recognition Index, and so those participants were not included in the final dataset (their individual pattern of results were examined and were found to have inattentive responding). There was no significant difference in age or gender between the participants who were deleted and those who were retained (the mean age of the participants who were deleted was 45.92 years, SD = 11.18, and they were 63% female). I deliberately oversampled initially because I predicted a high attrition rate, with participants not completing the emotion recognition component of the survey due to its length and the attention it required.
Emotion Recognition was assessed with the Emotion Recognition Index (ERI; Scherer & Scherer, 2011), which assesses both facial emotion recognition and vocal emotion recognition. Participants are first presented with a series of 30 pictures. The pictures represent people expressing joy, anger, sadness, fear, or disgust. After seeing a picture for 10 seconds, participants are asked to choose which of these five emotions was displayed. Thereafter, a series of 30 vocal clips of someone speaking gibberish, in which the emotion is expressed using only tone are presented. The vocal clips represent people expressing joy, anger, sadness, fear, or complete neutrality (i.e. no emotion). After listening to an audio clip, participants select between the five emotion options (joy, anger, sadness, fear, neutral). The overall emotion recognition score consists of the percentage of pictures and audio clips correctly identified. The facial and vocal emotion recognition scores were significantly correlated ($r(236) = 0.350$, $p < 0.01$). For examples of both the facial and vocal items please go to [www.unige.ch/cisa/properemo/eri/demo.php](http://www.unige.ch/cisa/properemo/eri/demo.php).

Data Analysis

All data were analyzed using SPSS version 24.

Identification. Identification of the transformational leadership dimensions was determined by a nonparametric test of the percentage of participants who correctly answered the forced choice item. One sample $\chi^2$ tests were run for each condition. If participants guessed between the options, the expected accuracy rate would be 1/6. However, there are clear conceptual differences between positive leadership (the four transformational leadership dimensions) and negative leadership (passive and abusive leadership), and so I presumed that people would be able to eliminate the negative leadership options. Under this assumption, the expected accuracy rate when guessing would not be 1/6 but instead 1/4. Thus, a more stringent
test was computed, with nonparametric analyses used to assess whether participants did significantly better than a 25% accuracy cut-off point.

**Differentiation.** To determine whether participants could differentiate between the leadership dimensions, a series of paired sample t-tests were conducted using data obtained from the sliding scale format. I compared the ratings of inspirational motivation, idealized influence, individualized consideration, and intellectual stimulation within each of the four leadership conditions. Running multiple paired sample t-tests increases the chance of family-wise error. As such, I implemented a post hoc Bonferroni adjustment, i.e., $\alpha$/number of tests conducted (0.05/3 in each case), thereby resetting the probability level to 0.017.

**Effect of follower emotion recognition.** Lastly, $\chi^2$ tests were used to examine the effect of follower emotion recognition on the accuracy of identifying the leadership dimension, based on a mean-split of participants’ Emotion Recognition Index scores.

**Results**

Descriptive statistics for all study variables appear in Table 3.2.

**Identification**

I first examined whether participants accurately identified the leadership dimension present in the vignette they had read using the forced-choice technique. The accuracy with which the different transformational leadership components could be identified were as follows: inspirational motivation - 41.46% correct (17 of 41 participants answered correctly), idealized influence - 54.55% correct (18 of 33 participants answered correctly), individualized consideration - 58.54% correct (24 of 41 participants answered correctly), and intellectual stimulation - 39.47% correct (15 of 38 answered correctly).
Based on the nonparametric $\chi^2$ tests, participants were significantly able to identify inspirational motivation ($\chi^2 (3, N = 41) = 13.800, p < .01$), idealized influence ($\chi^2 (3, N = 33) = 17.750, p < .01$), and individualized consideration ($\chi^2 (3, N = 41) = 32.297, p < .01$). Participants did not significantly identify intellectual stimulation ($\chi^2 (3, N = 38) = 5.703, p < .01$). These findings support H1a, H2a, and H3a, while H4a is rejected.

**Differentiation**

To assess whether participants could distinguish between the leadership dimensions, I examined the results of paired sample t-tests, which used the sliding scale responses. Descriptive statistics for each of the conditions are reported in Table 3.3.

Inspirational motivation could be differentiated from idealized influence: $t(39) = 3.993, p = 0.000$, individualized consideration: $t(40) = 2.981, p = 0.005$, and intellectual stimulation: $t(40) = 3.255, p = 0.002$, supporting H1b, H1c and H1d.

Idealized influence could be differentiated from inspirational motivation ($t(28) = 2.866, p = 0.008$) and intellectual stimulation ($t(29) = 3.268, p = 0.003$), but not individualized consideration ($t(30) = 0.727, p = ns$). Thus H2b and H2d are supported, while H2c is rejected.

Individualized consideration could be distinguished from inspirational motivation ($t(38) = 3.070, p = 0.004$), but neither idealized influence ($t(36) = 2.126, p = ns$) nor intellectual stimulation ($t(38) = 1.238, p = ns$). Thus, H3b was supported while H3c and H3d were rejected.

Finally, contrary to H4b, H4c and H4d, intellectual stimulation could not be differentiated from any of the other three dimensions: inspirational motivation: $t(36) = 0.172, p = ns$, idealized influence: $t(36) = 0.332, p = ns$, or individualized consideration: $t(35) = -0.332, p = ns$.

**Effect of follower emotion recognition**
I then assessed whether participants’ emotion recognition improved the accuracy with which they could identify the specific transformational leadership components. For the purposes of analyses, I created a mean split on the emotion recognition index ($M = 59.07$, $SD = 10.13$, Range = 26.50-81.50).

Participants who scored above average on the emotion recognition index had the following accuracy scores: inspirational motivation - 40.00% (12 of 30 participants), idealized influence - 54.17% (13 of 24 participants), individualized consideration - 68.75% (11 of 16 participants), and intellectual stimulation - 47.83% (11 of 23 participants). Participants who had below average emotion recognition scores had the following accuracy percentages: inspirational motivation - 45.45% (5 of 11 participants), idealized influence - 55.56% (5 of 9 participants), individualized consideration - 52% (13 of 25 participants), and intellectual stimulation - 26.67% (4 of 15 participants).

Based on $\chi^2$ tests (see Table 3.4), there were no significant differences between the accuracy percentages between high and low emotion recognition on any of the dimensions (inspirational motivation: $\chi^2 (1, N = 41) = 0.099, p = ns$, idealized influence: $\chi^2 (1, N = 33) = 0.005, p = ns$, individualized consideration: $\chi^2 (1, N = 41) = 1.128, p = ns$, intellectual stimulation: $\chi^2 (1, N = 38) = 1.701, p = ns$). Thus, follower emotion recognition had no effect on the ability to accurately identify the leadership dimensions (H1e, H2e, H3e, or H4e are not supported).

3.4 Study 3

The purpose of Study 3 was to conduct a constructive replication of Study 2, using a validated questionnaire to assess whether the four dimensions of transformational leadership can be identified and differentiated.
**Method**

**Procedure**

The procedure for this study was similar to that used in Study 2, in that participants were randomly assigned to one of the same six conditions, using the same vignettes as in Study 2, and completed an emotion recognition ability test at the end of the survey. However unlike in Study 2, participants rated the leadership behaviour they read about using the Multifactor Leadership Questionnaire.

**Participants**

Participants were again recruited using the online data collection service ClearVoice (http://clearvoiceresearch.com), and were required to be at least 25 years old and employed full-time. 176 participants completed the whole study\(^2\) \((M_{\text{age}} = 46.51 \text{ years}, SD = 11.61; 67\% \text{ female})\). N’s per condition are as follows: inspirational motivation \(n = 29\), idealized influence \(n = 28\), individualized consideration \(n = 32\), intellectual stimulation \(n = 28\), overall transformational leadership \(n = 29\), and control \(n = 30\).

**Measures**

*Transformational Leadership - MLQ* Participants rated transformational leadership using the 20 items from the Multifactor Leadership Questionnaire (MLQ; Bass & Avolio, 2000)

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\(^2\) 355 participants completed the first part of the survey but 179 of those either missed the attention checks, did not complete the test of emotion recognition, or had such low scores on the emotion recognition test that they were eliminated from the data (120 people did not start the ERI, 56 people started but did not complete the ERI, 2 people had either a facial or vocal score below 17, and 1 person completed the ERI but missed the attention check). The low scores were eliminated because it suggested inattentive responding within the ERI rather than an actual low emotion recognition ability. Tests between those participants who initially started the study and those who were included in the final sample show that there were no significant differences in demographics (participants who did not complete the survey were 71% female and were 47.03 years of age on average, SD = 13.70;
that assess the four dimensions of transformational leadership\textsuperscript{3}. Each of the items was scored on a five-point Likert scale, such that 1 = not at all, and 5 = frequently or always. There were eight idealized influence items (\(\alpha = .943\)), four inspirational motivation items (\(\alpha = .937\)), four individualized consideration items (\(\alpha = .924\)), and four intellectual stimulation items (\(\alpha = .908\)).

\textit{Emotion Recognition} was again assessed with the Emotion Recognition Index (ERI) (Scherer & Scherer, 2011). As in Study 2, the correlation between participants’ audio and visual scores was significant (\(r(174) = 0.369, p < 0.01\)).

\textbf{Data Analysis}

\textit{Identification} I computed between-group analyses of variance to determine whether participants were able to identify the transformational leadership dimensions. Identification between the behaviours would be supported, if for example, the mean inspirational motivation score for those reading about inspirational motivation is higher than the mean inspirational scores from the idealized influence condition, the individualized consideration condition, and the intellectual stimulation condition.

\textit{Differentiation} To test whether participants differentiated between the dimensions I conducted a series of paired sample t-tests within conditions. To illustrate, for those participants who read the inspirational motivation vignette, the mean inspirational motivation score was compared with the mean scores for idealized influence, individualized consideration, and intellectual stimulation. In those comparisons, the inspirational motivation score is predicted to be significantly higher than the other three scores. As with the previous study, a post hoc Bonferroni adjustment was made, providing an adjusted alpha level of .017.

\textsuperscript{3} Sample items are not included as the MLQ is proprietary, and the licencing agreement from Mindgarden mentioned in Chapter 2 included thesis research.
**Effect of Follower Emotion Recognition** Finally, to assess the role of emotional recognition, I created a mean split on participants’ emotion recognition scores and compared the mean scores of the high emotion recognition group to those of the low emotion group across all four dimensions using paired sample t-tests. So for example, for participants who read the idealized influence condition, the mean idealized influence score from the high emotion group was compared to that of the mean idealized influence score from the low emotion recognition group. I expect that the mean score will be significantly higher in the above average emotion recognition group.

**Results**

Descriptive statistics are represented in Table 3.5. All analyses are conducted using SPSS version 24.4

**Identification**

To assess whether participants could identify the four transformational leadership dimensions, I conducted between-group analyses of variance comparing the four transformational leadership conditions. Identification would require, for example, that inspirational motivation scores for those reading the inspirational motivation vignette are significantly higher than the scores for the other leadership dimensions for those reading the same vignette. See Table 3.6 for the results and the means and standard deviations of the dimensions.

Inspirational motivation was scored significantly higher in the inspirational motivation condition than in the other conditions ($F(3, 113) = 3.807, p = 0.012$), and so was identified. This supports H1a.

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4 In the results section the names of the transformational leadership dimensions have been shortened in some places to enhance readability. I use the following acronyms: inspirational motivation (IM), idealized influence (II), individualized consideration (IC), and intellectual stimulation (IS).
Idealized influence had a significantly higher score in the idealized influence condition than any others ($F(3, 113) = 2.886, p = 0.039$), supporting H2a.

Individualized consideration was not identified, as the score of individualized consideration in the individualized consideration condition was not different from that of the other conditions ($F(3, 113) = 0.200, p = ns$), thus H3a was not supported.

Intellectual stimulation was identified as its score was significantly highest in the intellectual stimulation condition ($F(3, 113) = 2.665, p = 0.051$), supporting H4a.

**Differentiation**

I conducted within-group comparisons for each of the four transformational leadership conditions to assess whether participants could differentiate between the four transformational leadership dimensions. Table 3.6 includes the means and standard deviations.

Participants could differentiate inspirational motivation from the other three leadership behaviors (IM vs. II: ($t(28) = 3.789, p = 0.001$), IM vs. IC: ($t(28) = 2.670, p = 0.012$), and IM vs. IS: ($t(28) = 3.923, p = 0.001$)) supporting H1b, H1c, and H1d.

Participants differentiated idealized influence from inspirational motivation ($t(27) = 3.005, p = 0.006$) supporting H2b, but they could not differentiate idealized influence from individualized consideration ($t(27) = 1.245, p = ns$), or intellectual stimulation ($t(27) = 0.734, p = ns$); thus neither H2c nor H2d were supported.

Individualized consideration could not be differentiated from any of the dimensions. (IC vs. IM ($t(31) = 0.505, p = ns$), IC vs. II ($t(31) = 1.820, p = ns$), or IC vs. IS ($t(31) = 1.807, p = ns$)). H3b, H3c, and H3d were not supported.
Intellectual stimulation could be differentiated from the other three leadership dimensions (IS vs. IM: \( t(27) = 4.935, p = 0.000 \), IS vs. II: \( t(27) = 3.892, p = 0.001 \), and IS vs. IC: \( t(27) = 4.059, p = 0.000 \)), providing support for H4b, H4c, and H4d.

**Effect of follower emotion recognition**

I analyzed the role of followers’ emotion recognition using paired-sample t-tests. To do so I initially conducted a mean split on the emotion recognition score (\( M = 59.06, SD = 10.05 \), Range = 27.00–76.50). I then conducted a series of paired-sample t-tests, comparing transformational leadership scores within each condition for those high and low in emotion recognition. Table 3.7 includes the means and standard deviations for the high and low emotion recognition groups.

Participants scoring higher on the ERI did significantly better than people scoring below average on the ERI at identifying inspiration motivation (IM: \( t(27) = -2.599, p = 0.015 \), and idealized influence (II: \( t(26) = -2.062, p = 0.049 \). In contrast, emotion recognition did not improve the accuracy with which participants identified individualized consideration (IC: \( t(30) = -1.462, p = ns \)), or intellectual stimulation (IS: \( t(26) = -1.203, p = ns \)). Thus H1e and H2e were supported but H3e and H4e received no support.

**3.5 Discussion**

The two studies conducted here tested whether the four transformational leadership dimensions could be identified, and whether they could be differentiated from one another. Irrespective of outcome method, inspirational motivation could consistently be identified and differentiated from idealized influence, individualized consideration, and intellectual stimulation. Idealized influence was also consistently identified.
Results of the other two dimensions were method dependent. When responding to the forced-choice item and the sliding scales, participants in the individualized consideration condition could identify individualized consideration and differentiate it from inspirational motivation. However, when using the MLQ, individualized consideration could not be identified or differentiated from the other three dimensions. In contrast, participants could identify intellectual stimulation and differentiate it from all other dimensions when transformational leadership was rated using the MLQ, but not when it was rated using the sliding scales or the forced-choice item.

Mixed support emerged for the role of emotion recognition. Above average emotion recognition enhanced the ability to identify inspirational motivation and idealized influence as rated by the MLQ, but not individualized consideration or intellectual stimulation. It also had no effect when leadership was rated on the sliding scale items. However, the few positive findings do provide initial support for the notion that followers’ emotion recognition is a relevant follower difference when it comes to the way in which leadership is perceived.

I now discuss the specific findings for each leadership dimension separately. What is evident from the studies is that the methodology matters, and so I will also discuss how the assessment of transformational leadership dimensions may have impacted the results. An overview of the results from both studies is presented in Table 3.8.

**Inspirational motivation.**

Independent of method, when participants viewed the inspirational motivation vignette they successfully identified inspirational motivation. Participants were able to differentiate inspirational motivation from idealized influence, individualized consideration, and intellectual stimulation if they were in the inspirational motivation condition. There was also some evidence
for the role of emotion recognition in identifying inspirational motivation. Participants higher in emotion recognition were more accurate than those lower in emotion recognition at identifying inspirational motivation when the leadership behaviours were rated on the MLQ.

Of all of the dimensions, the most consistent evidence emerges for the notion that inspirational motivation is identifiable and distinguishable, which also fits with the finding that inspirational motivation is the behaviour associated with the most positive and intense (and therefore recognizable) emotions.

**Idealized influence.**

In both studies, participants were able to identify idealized influence. Participants in the idealized influence condition were able to differentiate idealized influence from inspirational motivation. Participants could only differentiate idealized influence from intellectual stimulation when leadership was assessed using the sliding scale items. Irrespective of method used to assess the outcomes, participants could not differentiate idealized influence and individualized consideration. Last, some support emerged for the role of follower emotion recognition in recognizing idealized influence. When identifying the four transformational leadership dimensions using the MLQ, participants higher in emotion recognition were significantly better at identifying idealized influence.

Idealized influence could consistently be differentiated from inspirational motivation. This, taken together with the finding that participants could also differentiate inspirational motivation from idealized influence, is somewhat paradoxical. Idealized influence and inspirational motivation are the two transformational leadership dimensions that are often combined to create a variable reflecting charisma (e.g. Banks et al., 2017; Bono & Judge, 2004; Bono & Ilies, 2006), but the current findings suggest that they are perceived as separate
dimensions, calling into question the practice of aggregating scores from idealized influence and inspirational motivation.

**Individualized consideration**

Whether or not participants could identify and differentiate between the four transformational leadership dimensions was partially a function of the way in which transformational leadership was measured, and this was especially true for individualized consideration and intellectual stimulation.

Participants in the individualized consideration condition could identify the vignette as reflecting individualized consideration behaviours when responding using the forced choice item. They could also differentiate individualized consideration from inspirational motivation when rating the sliding scale items. However, they could not identify or differentiate individualized consideration when rating the leadership behaviours on the MLQ. Follower emotion recognition had no effect on the ability to successfully identify individualized consideration, irrespective of methodology used.

**Intellectual stimulation**

As mentioned previously, the results of intellectual stimulation were dependent on the way in which transformational leadership was assessed. Where the sliding scales and forced-choice item format were used, participants could not identify intellectual stimulation, nor could they distinguish between intellectual stimulation and any of the three other transformational leadership dimensions.

However, where transformational leadership was measured using the MLQ, participants could successfully identify intellectual stimulation when they were in the intellectual stimulation condition. Within this method of assessment, participants in the intellectual stimulation condition
could also differentiate intellectual stimulation from inspirational motivation, idealized influence and individualized consideration.

Finally, independent of measurement, followers’ emotion recognition had no effect on the identification of intellectual stimulation.

**Measurement Matters**

A consistent finding from these studies is that measurement matters, especially when it comes to the role of followers’ emotion recognition.

The pattern of results for individualized consideration and intellectual stimulation were opposite to each other. Individualized consideration could be identified and differentiated only when leadership was assessed using the forced choice and sliding scales, while intellectual stimulation could be identified and differentiated only when leadership was assessed using the MLQ. Followers’ emotion recognition only had an effect when participants responded to the MLQ. The MLQ is a more nuanced form of measurement than either the forced choice item or the sliding scales. This nuance does not seem to matter much for identification, but it does matter for detecting the role of followers’ emotional intelligence.

When examining the results of the two studies collectively, the findings suggest that followers are able to identify and distinguish between the transformational leadership dimensions under certain conditions. They are also more likely to do so for the dimensions that have stronger emotional valences (i.e. inspirational motivation and idealized influence). As such, in the context of an experiment where participants were only reading about a fictional leader, followers’ emotional recognition abilities did have some effect on their ability to identify inspirational motivation and idealized influence.
Across all four vignettes, although participants were only reading about one single dimension of transformational leadership, they consistently rated all four dimensions highly (i.e. all means > 75 on a 0-100 scale in Study 2, and > 3.5 on a 1-5 scale in Study 3, as can be seen in Table 3.3 and 3.6). Participants were asked to rate the leadership that they specifically read about in the vignettes, and so based on the high scores within conditions, participants only ever made subtle distinctions between the four transformational leadership dimensions.

**Strengths and Limitations**

There were several strengths across the two studies conducted. First, by using vignettes in which a fictional leader was described, the experimental method controlled for pre-existing perceptions of leadership, thereby controlling for relationship factors such as liking of leader. Controlling for followers’ pre-existing liking of their leader is important, as it has been shown to affect the way followers rate their leaders, such that followers who like their leaders rate their leaders as being higher on transformational leadership (Brown & Keeping, 2005).

Second, the use of vignettes also provided a more robust test of the effects of followers’ emotion recognition on their ability to identify and distinguish between the four dimensions of transformational leadership, as any individual differences in follower (participant) perceptions were experimentally controlled. Third, the pilot studies and use of vignettes enhanced the construct validity of the transformational leadership dimensions.

Fourth, the two studies also moved away from the sole focus on leaders’ emotions and emotional intelligence, and instead considered one specific dimension of followers’ emotional intelligence, extending the emotional intelligence literature. I used the Emotion Recognition Index (Scherer & Scherer, 2011), an ability measure of the relevant branch of followers’ emotional intelligence. Using an ability rather than a trait-based measure allowed me to test for
the effect of followers’ actual capacity to recognize different emotional expressions (rather than their self-perceptions of their abilities). The Emotion Recognition Index provides a reliable and valid test of the ability to accurately identify emotions (Scherer & Scherer, 2011). The use of both pictures and vocal clips makes the Emotion Recognition Index more encompassing than other emotion recognition tests, such as the Reading the Mind in the Eyes test (Baron-Cohen, Wheelwright & Hill, 2001) or the Japanese and Caucasian Brief Affect Recognition Test (Matsumoto et al., 2000). The attention required to complete the Emotion Recognition Index also eliminates a frequent concern about the quality of data obtained through commercial organizations that provide data (e.g. Anson, 2018). The participants who were included in the final sample were attentive to the questions.

Last, despite the considerable attrition rate in each of the four studies, attrition (i.e., experimental mortality) posed no threat to the interpretation of the findings, as participants who were excluded did not differ from those who completed the entire survey in terms of age or gender. The fact they did not differ on gender is important as women have higher emotional intelligence than men (Brackett et al., 2006), and age and emotional intelligence are positively correlated (Mayer, Salovey, Caruso & Sitarenios, 2000).

One substantial limitation of these studies is that the vignettes only described a leader’s behaviours without any mention of the corresponding emotions. It is therefore not possible for followers’ emotion recognition to exert its full effect, as there were no actual emotions for participants to perceive. Excluding any information about corresponding emotions also reduces the external validity of the findings. When leaders enact leadership behaviours they also exhibit emotions, and so for the vignettes to be more realistic they should have included descriptors of the leader’s emotions.
Another potential limitation inherent in both studies was the focus on followers’ emotion recognition, rather than their overall emotional intelligence. While emotion recognition is the first branch in the hierarchical model of emotional intelligence, an overall measure of emotional intelligence might have provided a more comprehensive picture of followers’ emotion-related capabilities, i.e., including the recognition of emotions, as well as the use, understanding, and regulation of emotion. Despite this, the decision to use emotional recognition was justified by several factors. First, emotion recognition is the branch that is most relevant to the context of the study. Followers’ ability to recognize the emotional display of others is pertinent to their ability to recognize leadership behaviours, especially as the results of Chapter 2 indicate that transformational leadership behaviours are associated with different emotional displays. Second, it would have been impractical to incorporate emotional intelligence tests such as the MSCEIT (Mayer & Salovey, 2002) in an online survey with participants recruited through a data collection service.

A third possible limitation was the use of ‘stimulating’ to represent the intellectual stimulation condition. The term was used to be more reader friendly, but could be perceived as being similar to ‘inspiring’ (the term that represented inspirational motivation). However one mitigating factor is that the terms were presented along with their definition, so the term ‘stimulating’ was followed by the definition of intellectual stimulation and the term ‘inspiring’ was followed by the definition of inspirational motivation. As a result, it is unlikely that participants confused the conditions of intellectual stimulation and inspirational motivation.

3.6 Conclusion

The results from the two studies begin to suggest that the transformational leadership dimensions can be identified and distinguished, and that followers’ emotion recognition has
some limited effect on followers’ ability to identify the leadership dimensions. This does provide initial (if somewhat mixed) support for the validity of the multidimensional nature of the transformational leadership construct. However, the lack of emotional cues within the vignettes means that the two studies may not provide a full test of whether people can identify and distinguish the transformational leadership dimensions, and whether followers’ emotion recognition affects people’s ability to identify the dimensions. As such, I follow up these studies with two studies that follow a similar methodology but include emotion cues within the vignettes.
3.7 References


Table 3.1
Differentiation between dimensions within conditions from pilot study (N=11)

<table>
<thead>
<tr>
<th>Inspirational Motivation Condition</th>
<th>Comparison</th>
<th>t</th>
<th>Lower CI</th>
<th>Upper CI</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM vs. II</td>
<td>5.931</td>
<td>42.113</td>
<td>92.796</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>IM vs. IC</td>
<td>4.342</td>
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<td>85.699</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>IM vs. IS</td>
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<td>27.126</td>
<td>82.692</td>
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<tr>
<td>IM vs. LF</td>
<td>32.032</td>
<td>87.292</td>
<td>100.344</td>
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<td></td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Idealized Influence Condition</th>
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<th>Lower CI</th>
<th>Upper CI</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>II vs. IM</td>
<td>7.527</td>
<td>45.119</td>
<td>83.063</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>II vs. IC</td>
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<td>37.213</td>
<td>74.060</td>
<td>0.000</td>
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</tr>
<tr>
<td>II vs. IS</td>
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<td></td>
</tr>
<tr>
<td>II vs. LF</td>
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<td>100.526</td>
<td>0.000</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Individualized Consideration Condition</th>
<th>Comparison</th>
<th>t</th>
<th>Lower CI</th>
<th>Upper CI</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC vs. IM</td>
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<td>54.145</td>
<td>92.400</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>IC vs. II</td>
<td>9.567</td>
<td>47.770</td>
<td>76.775</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>IC vs. IS</td>
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<td>28.356</td>
<td>75.098</td>
<td>0.001</td>
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</tr>
<tr>
<td>IC vs. LF</td>
<td>31.252</td>
<td>87.805</td>
<td>101.286</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intellectual Stimulation Condition</th>
<th>Comparison</th>
<th>t</th>
<th>Lower CI</th>
<th>Upper CI</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>IS vs. IM</td>
<td>9.560</td>
<td>59.123</td>
<td>95.058</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>IS vs. II</td>
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<td>48.951</td>
<td>89.049</td>
<td>0.000</td>
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<td>27.892</td>
<td>79.380</td>
<td>0.001</td>
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</tr>
<tr>
<td>IS vs. LF</td>
<td>42.029</td>
<td>89.964</td>
<td>100.036</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Transformational Leadership Condition</th>
<th>Comparison</th>
<th>t</th>
<th>Lower CI</th>
<th>Upper CI</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM vs. II</td>
<td>0.916</td>
<td>-14.663</td>
<td>6.118</td>
<td>0.381</td>
<td></td>
</tr>
<tr>
<td>IM vs. IC</td>
<td>0.894</td>
<td>-5.828</td>
<td>13.647</td>
<td>0.392</td>
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</tr>
<tr>
<td>IM vs. IS</td>
<td>-0.323</td>
<td>-2.151</td>
<td>1.606</td>
<td>0.753</td>
<td></td>
</tr>
<tr>
<td>II vs. IC</td>
<td>-0.053</td>
<td>-15.536</td>
<td>14.809</td>
<td>0.958</td>
<td></td>
</tr>
<tr>
<td>II vs. IS</td>
<td>-0.944</td>
<td>-15.279</td>
<td>6.188</td>
<td>0.368</td>
<td></td>
</tr>
<tr>
<td>IC vs. IS</td>
<td>-1.056</td>
<td>-13.007</td>
<td>4.643</td>
<td>0.316</td>
<td></td>
</tr>
<tr>
<td>IM vs. LF</td>
<td>23.568</td>
<td>76.635</td>
<td>92.638</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>II vs. LF</td>
<td>17.919</td>
<td>70.371</td>
<td>90.357</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>IC vs. LF</td>
<td>23.675</td>
<td>76.918</td>
<td>23.675</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>IS vs. LF</td>
<td>16.509</td>
<td>69.832</td>
<td>91.623</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>
Table 3.2
Descriptive statistics and accuracy percentages, Study 2 (N=238)

<table>
<thead>
<tr>
<th>Age</th>
<th>Gender</th>
<th>ER</th>
<th>IM %Correct</th>
<th>II %Correct</th>
<th>IC %Correct</th>
<th>IS %Correct</th>
<th>LF %Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>45.86</td>
<td>0.67</td>
<td>59.78</td>
<td>0.41</td>
<td>0.55</td>
<td>0.39</td>
<td>0.59</td>
</tr>
<tr>
<td>SD</td>
<td>10.56</td>
<td>0.47</td>
<td>9.74</td>
<td>0.50</td>
<td>0.51</td>
<td>0.50</td>
<td>0.50</td>
</tr>
</tbody>
</table>
**Table 3.3**
*Mean scores for transformational leadership dimensions, Study 2 (N = 238).*

<table>
<thead>
<tr>
<th></th>
<th>IM Ratings</th>
<th>II Ratings</th>
<th>IC Ratings</th>
<th>IS Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>IM Condition</td>
<td>93.61</td>
<td>9.93</td>
<td>82.70</td>
<td>22.26</td>
</tr>
<tr>
<td>II Condition</td>
<td>82.74</td>
<td>27.48</td>
<td>92.19</td>
<td>14.17</td>
</tr>
<tr>
<td>IC Condition</td>
<td>79.63</td>
<td>19.80</td>
<td>82.55</td>
<td>17.82</td>
</tr>
<tr>
<td>IS Condition</td>
<td>81.34</td>
<td>23.34</td>
<td>80.45</td>
<td>22.33</td>
</tr>
</tbody>
</table>
### Table 3.4
*Accuracy percentages broken down by emotion recognition mean split, Study 2 (N =238)*

<table>
<thead>
<tr>
<th></th>
<th>IM % Correct</th>
<th>II % Correct</th>
<th>IC % Correct</th>
<th>IS % Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>0.40</td>
<td>0.54</td>
<td>0.48</td>
<td>0.69</td>
</tr>
<tr>
<td>Low</td>
<td>0.45</td>
<td>0.56</td>
<td>0.27</td>
<td>0.52</td>
</tr>
<tr>
<td>High</td>
<td>0.51</td>
<td>0.53</td>
<td>0.46</td>
<td>0.48</td>
</tr>
<tr>
<td>Low</td>
<td>0.52</td>
<td>0.51</td>
<td>0.48</td>
<td>0.51</td>
</tr>
<tr>
<td>Mean</td>
<td>0.40</td>
<td>0.54</td>
<td>0.48</td>
<td>0.69</td>
</tr>
<tr>
<td>SD</td>
<td>0.50</td>
<td>0.51</td>
<td>0.51</td>
<td>0.51</td>
</tr>
<tr>
<td>$\chi^2$</td>
<td>0.099</td>
<td>0.005</td>
<td>1.128</td>
<td>1.701</td>
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</table>

*Note.* Throughout the thesis, descriptive statistics are presented with two decimal places, whereas all other inferential statistics are presented with three decimal places.
Table 3.5
Descriptive statistics for all Study 3 variables (N=176)

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>IM</th>
<th>II</th>
<th>IC</th>
<th>IS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>46.51</td>
<td>11.61</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
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<td>0.47</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IM</td>
<td>3.63</td>
<td>1.22</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>3.55</td>
<td>1.17</td>
<td>.913**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IC</td>
<td>3.61</td>
<td>1.25</td>
<td>.864**</td>
<td>.910**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IS</td>
<td>3.57</td>
<td>1.31</td>
<td>.805**</td>
<td>.875**</td>
<td>.875**</td>
<td></td>
</tr>
<tr>
<td>ER</td>
<td>59.06</td>
<td>10.05</td>
<td>0.164*</td>
<td>0.117</td>
<td>.159*</td>
<td>.162*</td>
</tr>
</tbody>
</table>

* $p < 0.05$
** $p < 0.01$
Table 3.6
Mean scores for transformational leadership dimensions, Study 3 (N=113)

<table>
<thead>
<tr>
<th></th>
<th>IM Condition</th>
<th>II Condition</th>
<th>IC Condition</th>
<th>IS Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM Rating</td>
<td>4.29 ± 0.87</td>
<td>3.96 ± 0.85</td>
<td>3.91 ± 0.76</td>
<td>3.55 ± 0.83</td>
</tr>
<tr>
<td>II Rating</td>
<td>3.93 ± 0.87</td>
<td>4.21 ± 0.73</td>
<td>3.77 ± 0.68</td>
<td>3.64 ± 0.76</td>
</tr>
<tr>
<td>IC Rating</td>
<td>4.01 ± 0.96</td>
<td>4.10 ± 0.91</td>
<td>3.96 ± 0.78</td>
<td>3.94 ± 0.71</td>
</tr>
<tr>
<td>IS Rating</td>
<td>3.67 ± 1.13</td>
<td>4.13 ± 1.05</td>
<td>3.72 ± 0.95</td>
<td>4.27 ± 0.71</td>
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</tbody>
</table>
Table 3.7
Mean scores for transformational leadership dimensions broken into high and low emotion recognition, Study 3 (N=113)

<table>
<thead>
<tr>
<th>ER</th>
<th>IM Condition</th>
<th>II Condition</th>
<th>IC Condition</th>
<th>IS Condition</th>
</tr>
</thead>
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<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>IM Rating</td>
<td>High</td>
<td>4.55</td>
<td>0.63</td>
<td>4.19</td>
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<tr>
<td></td>
<td>Low</td>
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<td>1.09</td>
<td>3.77</td>
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<td>II Rating</td>
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<td>0.67</td>
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<td></td>
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<td>3.96</td>
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<td>3.82</td>
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<tr>
<td>IS Rating</td>
<td>High</td>
<td>3.93</td>
<td>1.09</td>
<td>4.65</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>3.11</td>
<td>1.07</td>
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</table>
Table 3.8
Overview of results from Study 2 and 3

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<tr>
<th></th>
<th>Inspirational Motivation</th>
<th>Idealized Influence</th>
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<td></td>
<td>Ident</td>
<td>Differentiation</td>
</tr>
<tr>
<td>H1a</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>H1b</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>H1c</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>H1d</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>H1e</td>
<td></td>
<td>✓</td>
</tr>
<tr>
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<td>✓</td>
</tr>
<tr>
<td>Study 3 (MLQ)</td>
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<table>
<thead>
<tr>
<th></th>
<th>Individualized Consideration</th>
<th>Intellectual Stimulation</th>
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</thead>
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<td>Differentiation</td>
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<td>H3c</td>
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<td>×</td>
</tr>
<tr>
<td>H3d</td>
<td></td>
<td>×</td>
</tr>
<tr>
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<td>✓</td>
</tr>
<tr>
<td>Study 3 (MLQ)</td>
<td>×</td>
<td>×</td>
</tr>
</tbody>
</table>

* ✓ = Supported, × = Rejected, Ident = identification, ER = emotion recognition, FC = forced choice, SS = sliding scale, MLQ = multifactor leadership questionnaire
Chapter 4

Testing the Multidimensional Nature of Transformational Leadership:

A Replication and Extension
4.1 Introduction

One plausible explanation for the non-significant findings (such as participants’ inability to identify or differentiate individualized consideration or intellectual stimulation, and the inconsistent effects of follower emotion recognition) in Chapter 3 was the lack of emotional information provided within the vignettes. Specifically, each vignette described a specific transformational behaviour, with no mention of any associated emotional expression. This is potentially important, as leadership behaviours are not enacted in an emotional vacuum in “real-world” situations. Thus, experimental realism (or ecological validity) might be enhanced if cues about the intensity and positivity of the leader’s emotions are associated with the different transformational leadership behaviours. This might be especially relevant regarding the test of followers’ emotion recognition. Emotion recognition might not have had a significant effect on the identification of idealized influence or individualized consideration in the two prior studies because it is difficult for followers’ emotion recognition to play a role if there is limited emotion information for followers to recognize. Participants in the studies from the previous chapter would have had to rely on inference, rather than being able to use actual emotional cues to help identify the leadership dimensions.

To address this, I modified the vignettes used in the prior chapter to also include information regarding emotional expressions associated with each of the transformational leadership behaviours. This was achieved by including two emotion words per vignette (and eight emotion words in the overall transformational leadership condition), which were chosen based on the findings of Chapter 2, which was the study plotting the transformational leadership dimensions’ corresponding emotions on the Circumplex Model of emotions.

Thus, the core challenge of the two studies in this chapter, Study 4 and 5, is to investigate
whether the addition of emotional cues for the different transformational behaviours enhance the extent to which the transformational leadership dimensions can be identified and distinguished.

As a result, the modified hypotheses for the current research are as follows:

**H1:** With emotion cues added, individuals are able to (a) identify inspirational motivation, and differentiate it from (b) idealized influence, (c) individualized consideration, and (d) intellectual stimulation.

**H2:** With emotion cues added, individuals are able to (a) identify idealized influence, and differentiate it from (b) inspirational motivation, (c) individualized consideration, and (d) intellectual stimulation.

**H3:** With emotion cues added, individuals are able to (a) identify individualized consideration, and differentiate it from (b) inspirational motivation, (c) idealized influence, and (d) intellectual stimulation.

**H4:** With emotion cues added, individuals are able to (a) identify intellectual stimulation, and differentiate it from (b) inspirational motivation, (c) idealized influence, and (d) individualized consideration.

Last:

*Individuals higher, compared to those lower, in emotion recognition ability will more accurately identify [H1e] inspirational motivation, [H2e] idealized influence, [H3e] individualized consideration, and [H4e] intellectual stimulation, when emotion cues are added.*

### 4.2 Study 4

The purpose of the study is to provide a constructive replication of Study 2 from the previous chapter, and assess whether the inclusion of brief emotional cues increases followers’ ability to identify the leadership dimensions, differentiate between them, and whether emotion recognition affects this identification and differentiation when emotional cues are provided.

**Method**

**Procedure**

The procedure for this study was identical to that used for Study 2 with one exception, namely vignettes now included two emotional cues associated with each leadership behaviour. These vignettes are included in Appendix E. As in Study 1, participants were randomly assigned
to read one vignette. They were then asked to rate the extent to which each of the dimensions was present using a sliding scale from 0 to 100, as well as pick the dimension that best represented the vignette using a forced-choice technique. Finally, participants completed the Emotion Recognition Index (Scherer & Scherer, 2011).

Participants

This sample was again recruited using ClearVoice, and participants met the same basic requirements of living in North America, being at least 25 years of age, and employed full time (>30 hours per week). The final sample consisted of 185 participants\(^5\) (M age = 46.86 years, SD = 10.56; 67% female), with 31 participants in the inspirational motivation condition, 33 participants in the idealized influence condition, 33 participants in the individualized consideration, 28 participants in the intellectual stimulation condition, 29 participants in the overall transformational leadership condition, and 31 participants in the laissez-faire condition.

Measures

**Transformational Leadership – Forced Choice** Participants chose the one style that best represented the leadership present in the vignette from a list of six options (ethical, inspirational relational, stimulating, passive, and abusive).

**Transformational Leadership – Sliding Scale** Participants also rated the presence of each of the dimensions using the sliding scale described in Study 2.

**Emotion Recognition** was again measured with the Emotion Recognition Index (Scherer & Scherer, 2011). The facial and vocal emotion recognition scores correlated significantly

\(^5\) 327 participants originally participated in the study, but the final sample of 185 only includes those who completed the entire study and who did not score below the cutoff on the emotion recognition index. Of the 142 participants who were deleted, 81 were deleted because they did not start the Emotion Recognition Index, 58 because they did not complete the Emotion Recognition Index, and 3 for low scores on the Emotion Recognition Index (scores below 17 on either the facial or vocal component). The participants who were deleted from the study (68% female; M age = 46.64 years old, SD = 11.64) did not differ from those included in the study in terms of age or gender.
(r(183) = 0.362, p < 0.01).

Data Analysis

The same data analytic strategy as implemented in Study 2 was again used here with the same Bonferroni adjustment for the differentiation analyses (p < .017).

Results

Descriptive statistics for the study appear in Table 4.1.

Identification

I first examined whether participants were able to identify the transformational leadership dimension they read. The accuracy percentages of the conditions are as follows: inspirational motivation - 70.97% correct (22 of 31), idealized influence - 39.39% correct (13 of 33), individualized consideration - 51.52% correct (17 of 33), and intellectual stimulation - 35.71% correct (10 of 28).

Results of the $\chi^2$ tests indicate that participants could successfully identify inspirational motivation ($\chi^2 (3, 31) = 36.742, p < .01$), idealized influence ($\chi^2 (3, 33) = 8.250, p < .05$), and individualized consideration ($\chi^2 (3, 33) = 19.750, p < .01$), but not intellectual stimulation ($\chi^2 (3, 28) = 6.926, p = ns$). Therefore H1a, H2a, H3a are supported, and H4a is rejected.

Differentiation

I examined whether participants were able to differentiate the dimensions when rating the presence of specific leadership behaviours portrayed in the vignettes with emotion cues present. This required a series of within-group paired sample t-tests, and the means and standard deviations across each of the conditions appear in Table 4.2.
Inspirational motivation could not be differentiated from idealized influence \((t(30) = 0.680, p = ns)\), individualized consideration \((t(30) = 0.207, p = ns)\), or intellectual stimulation \((t(30) = 1.430, p = ns)\), as a result of which H1b, H1c, and H1d are rejected.

Idealized influence could be differentiated from intellectual stimulation \((t(31) = 3.677, p = 0.001)\), but neither inspirational motivation \((t(32) = 1.457, p = ns)\) nor individualized consideration \((t(32) = 0.226, p = ns)\). Thus, H2d is supported while H2b and H2c are rejected.

Participants were able to differentiate individualized consideration from idealized influence \((t(31) = 2.993, p = 0.005)\) but not from inspirational motivation \((t(31) = 1.999, p = ns)\) or intellectual stimulation \((t(31) = 1.991, p = ns)\). This supports H3c and rejects H3b and H3d.

Finally, participants were unable to differentiate intellectual stimulation from any of the other dimensions (inspirational motivation: \(t(26) = 0.428, p = ns\), idealized influence: \(t(27) = 0.066, p = ns\), individualized consideration: \(t(27) = -0.625, p = ns\)). Thus H4b, H4c, and H4d were not supported.

**Effect of follower emotion recognition**

Last, I tested whether participants’ emotion recognition impacted the accuracy with which they could identify or differentiate the four transformational leadership dimensions (presented in Table 4.3). First, the sample was split using the mean score \((M = 59.78, SD = 9.74)\) on the ERI as the cut-off. Participants who scored above average on the ERI had the following accuracy scores: inspirational motivation - 73.68% correct (14 of 19), idealized influence - 50.00% correct (10 of 20), individualized consideration - 66.67% correct (12 of 18), and intellectual stimulation - 42.11% correct (8 of 19). The accuracy scores for those participants who had below average emotion recognition scores are as follows: inspirational motivation -
66.67% correct (8 of 12), idealized influence - 23.08% correct (3 of 13), individualized consideration - 33.33% correct (5 of 15), and intellectual stimulation - 22.22% correct (2 of 9).

To test whether these differences were significant, I conducted chi-square tests; as can be seen in Table 4.3. None of the differences achieved significance (inspirational motivation: $\chi^2(1, 31) = 0.176, p = ns$, idealized influence: $\chi^2(1, 33) = 2.392, p = ns$, individualized consideration: $\chi^2(1, 31) = 2.166, p = ns$, intellectual stimulation: $\chi^2(1, 28) = 0.502, p = ns$). Therefore, H1e, H2e, H3e, and H4e are rejected.

4.3 Study 5

The purpose of this study is to see whether the inclusion of emotional cues within the vignettes would affect followers’ ability to identify and differentiate transformational leadership. As in Study 4, participants read the vignettes that included a brief description of the emotions the leader displayed, and then like Study 3, the participants rated the leadership behaviours using the Multifactor Leadership Questionnaire. As such, this study is a replication and extension of Study 3, in which all three sets of hypotheses are tested.

Method

Procedure

Participants were randomly assigned to read one vignette, which included both the description of the specific leader behaviour (i.e. the same vignettes as in Study 4) together with emotional cues, and then completed the MLQ, and the ERI (like in Study 3). Participants for this study were also recruited using ClearVoice, with the same basic requirements of being at least 25 years old, working full time, and living in North America.

Participants
There were 177 participants\(^6\) (M age = 48.38 years, SD = 12.14; 64% female); 29 participants were in the inspirational motivation condition, 26 in the idealized influence condition, 35 in the individualized consideration condition, 39 in the intellectual stimulation condition, 29 in the laissez-faire condition, and 29 in the overall transformational leadership condition.

**Measures**

*Transformational Leadership - MLQ* was measured using the Multifactor Leadership Questionnaire (Bass & Avolio, 2000). The reliabilities for the subscales are as follows: idealized influence (\(\alpha = .941\)), inspirational motivation (\(\alpha = .931\)), individualized consideration (\(\alpha = .902\)), and intellectual stimulation (\(\alpha = .898\)).

*Emotion Recognition* was again measured with the Emotion Recognition Index (Scherer & Scherer, 2011) and the facial and vocal scores were significantly correlated (\(r(175) = 0.244, p < 0.01\)).

**Data Analysis**

As in the previous three studies multiple analyses were performed to assess the three main questions of identification, differentiation, and the role of follower emotion recognition. The series of analyses for this study follow the same steps as in Study 3, with the same adjusted alpha for the paired sample t-tests that test differentiation (\(p < .017\)).

**Results**

Descriptive statistics appear in Table 4.4.

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\(^6\) 337 participants completed the first portion of the survey. 160 participants were eliminated from the data for the same reasons as in the other studies. 121 people did not start the ERI, 35 people did not complete the ERI and 4 people scored below 17 on either the facial or vocal portion of the ERI. Of the participants who were deleted from the final dataset, 64% were female and they were 46.82 years of age on average (SD = 11.64). These demographics are not significantly different than those of the participants who were included in the final dataset.
Identification

A series of between-group comparisons of the leadership conditions were conducted using an ANOVA to test whether participants could identify the appropriate dimension, the results of which appear in Table 4.5.

Participants could appropriately identify inspirational motivation ($F(3, 115) = 8.674, p = 0.000$), such that the inspirational motivation mean score was significantly higher in the inspirational motivation condition than the inspirational motivation mean score in any of the other transformational leadership conditions. H1a was thus supported.

Participants were not able to accurately identify idealized influence ($F(3, 115) = 2.560, p = 0.058$). Therefore H2a is rejected.

Individualized consideration was also not identified ($F(3, 115) = 1.157, p = 0.329$), rejecting H3a.

Participants could identify intellectual stimulation ($F(3, 115) = 5.506, p = 0.001$), with mean intellectual stimulation scores higher in the intellectual stimulation condition than the other conditions. This supports H4a.

Differentiation

Within-group comparisons were conducted using paired sample t-tests (with a Bonferonni adjustment) to assess whether participants could differentiate between the four transformational leadership behaviours.

Participants differentiated inspirational motivation from the other three dimensions within the inspirational motivation condition (IM vs. II: ($t(28) = 5.959, p = 0.000$), IM vs. IC: ($t(28) = 4.246, p = 0.000$), and IM vs. IS: ($t(28) = 4.664, p = 0.000$)) supporting H1b, H1c, and H1d.
Similarly, participants could differentiate idealized influence from inspirational motivation within the idealized influence condition: II and IM ($t(25) = 3.817, p = 0.001$) supporting H2b, but could not differentiate idealized influence from individualized consideration ($t(25) = 1.095, p = ns$), or intellectual stimulation ($t(25) = 0.399, p = ns$), and H2c and H2d were rejected.

Participants differentiated individualized consideration from all three other dimensions (IC vs. IM: $t(24) = 3.870, p = 0.001$, IC vs. II: $t(24) = 3.386, p = 0.002$, and IC vs. IS: $t(24) = 3.549, p = 0.002$). Thus H3b, H3c, and H3d were supported.

Last, participants did not differentiate intellectual stimulation from inspirational motivation, idealized influence, or individualized consideration (IS vs. IM: $t(38) = 2.019, p = ns$, IS vs. II: $t(38) = 2.206, p = ns$, and IS vs. IC: $t(38) = 1.820, p = ns$). As such H4b, H4c, and H4d were rejected.

**Effect of follower emotion recognition**

Finally, I again analyzed the role of followers’ emotion recognition (see Table 4.6). For the purposes of analyses, participants were classified as being either high or low on emotion recognition based on a mean score split on the ERI scale ($M = 60.92, SD = 9.24$). Comparisons of the scores of the high and low emotion recognition groups on each leadership dimension (within its corresponding condition) showed that participants with above average emotion recognition scores did significantly better than people with below average scores at identifying idealized influence (II: $t(26) = 3.970, p = 0.000$) and intellectual stimulation (IS: $t(37) = 2.427, p = 0.020$). However emotion recognition had no effect on the identification of inspiration motivation (IM: $t(27) = -0.065, p = ns$) or individualized consideration (IC: $t(23) = 1.792, p = ns$). Thus H2e and H4e were supported, but H1e and H3e were rejected.
4.4 Discussion

Studies 4 and 5 provided an opportunity to replicate the findings from Studies 2 and 3, while including emotion cues, eliminating a plausible threat from those studies. I first provide an overview of the results of Studies 4 and 5 on their own, and then compare the results of the four studies together.

Study 4

When provided with emotional cues and when rating leadership using the sliding scale and forced choice question, participants could accurately identify inspirational motivation, idealized influence and intellectual stimulation but not individualized consideration. In addition, participants could differentiate idealized influence from intellectual stimulation, and individualized consideration from idealized influence. However, participants could not differentiate inspirational motivation or intellectual stimulation from any of the dimensions.

Last, there was no effect of follower emotion recognition on the identification of any dimension.

Study 5

When reading vignettes with emotional cues and rating leadership using the MLQ, participants could accurately identify inspirational motivation and intellectual stimulation but could not identify idealized influence or individualized consideration. They could then differentiate both inspirational motivation and individualized consideration from all other dimensions. Idealized influence was only differentiated from inspirational motivation. Intellectual stimulation was not differentiated from any other dimensions.

Last, follower emotion recognition enhanced identification of idealized influence and intellectual stimulation, but not inspirational motivation or individualized consideration.
Comparing Findings with and without Emotion Cues

Across the four studies, mixed support emerged for the hypotheses. As can be seen from Table 4.7, which provides a comparison of the findings from Study 2 and 4, and Study 3 and 5, not all findings from Study 2 or 3 were replicated in Studies 4 and 5. Independent of the form of measurement, participants consistently rated all of the transformational leadership dimensions highly. In Study 4 all of the transformational leadership dimensions’ means were greater than 74 on a 0-100 scale (see Table 4.2), and in Study 5 all of the dimensions’ means were greater than 3.3 on a 1-5 scale (see Table 4.5). This is consistent with the results of Study 2 and 3 and suggests that despite only ever reading about one transformational leadership dimension and being instructed to report on only the leadership they read, participants made subtle rather than clear distinctions between the four dimensions.

Below I discuss the findings regarding the identification of and differentiation between the four transformational leadership dimensions, and the role of followers’ emotion recognition as they compare across the four studies.

Identification

Whether using the forced choice question and sliding scale items or the MLQ, and whether with emotional cues or not, the findings regarding identification mostly (a) replicate across these methods, and (b) support the idea that people can identify the transformational leadership dimensions when presented separately. Whether the vignettes included emotion cues or not made a difference for the identification of inspirational motivation and idealized influence. Although no statistical comparison was made, inspirational motivation was identified more accurately when emotional cues were present (41% accuracy in Study 2 vs. 71% accuracy in Study 4). When rating leadership on the MLQ, participants were unable to identify idealized
influence when the vignette contained emotion cues (Study 5) but were able to identify it when the vignette did not contain emotion cues (Study 3). This is contrary to what I proposed and does not seem to be based on the methodological change of adding emotion cues to the vignette.

**Differentiation**

There was more mixed support when it came to differentiation. There were three notable findings regarding the differentiation between the transformational leadership dimensions, where the results of Study 4 and 5 were different from those of Study 2 and 3. These can in part be explained by methodology (i.e., how leadership was measured, and whether or not emotions were included in the vignettes).

First, in Studies 2, 3, and 5 participants successfully differentiated inspirational motivation from the other three dimensions. Followers’ inability to differentiate inspirational motivation from the other dimensions on the sliding scales (Study 4) could in part be due to the measurement strategy. The transformational leadership dimensions were more likely to be differentiated from each other when ratings were made using the MLQ rather than the sliding scale items. The lesson from this is that more nuanced measurement tools are more likely to reveal nuanced differences in transformational leadership behaviours.

Second, participants differentiated individualized consideration from all three dimensions when emotional cues were present, and when transformational leadership was rated using the MLQ (Study 5). However, when the sliding scale and forced choice were used (i.e., in Studies 2 and 4), individualized consideration was only successfully differentiated from inspirational motivation or idealized influence. One plausible reason for these findings is that individualized consideration is associated with less intense and less positive emotions than inspirational motivation and idealized influence. Thus, differentiation was more likely when emotion cues...
were included in the vignettes and leadership ratings were based on the MLQ—a more nuanced leadership measure.

The third notable finding was that intellectual stimulation was only differentiated from the other three dimensions when emotion cues were not provided and leadership was rated using the MLQ (Study 3), but not in any of the other studies (Study 2, 4, or 5).

**Emotion Recognition**

Across the studies, emotion recognition only influenced identification of the leadership dimensions when transformational leadership was measured using the MLQ. In Studies 2 and 4 (where leadership measured using forced-choice and sliding scale items), emotion recognition had no effect, but in Studies 3 and 5 (where leadership was measured with the MLQ) it did. In both Study 3 and Study 5, followers’ emotion recognition enhanced the identification of idealized influence. In Study 3 (with no emotion cues in the vignettes) but not Study 5 (with emotion cues included in the vignettes), followers’ emotion recognition related to the identification of inspirational motivation. In Study 3 (with no emotion cues in the vignettes) but not Study 5 (with emotion cues included in the vignettes), followers’ emotion recognition related to the identification of inspirational motivation. Finally, in Study 5 (emotion cues present) but not Study 3 (emotion cues absent), followers’ emotion recognition related to the identification of intellectual stimulation. Below I provide explanations for these latter two findings regarding emotion recognition.

First, with no emotion cues present (Study 3), emotion recognition significantly impacted participants’ ability to identify inspirational motivation, but this effect no longer emerged when emotion cues were included in the vignettes (Study 5). One explanation for this is that emotion recognition ability becomes redundant in the presence of sufficient emotion cues. The inspirational motivation scores of the low and high emotion recognition groups within the
inspirational motivation condition were both very high, meaning everyone correctly identified inspirational motivation

Second, in contrast to inspirational motivation as was just discussed, emotion recognition significantly improved the ability to identify intellectual stimulation but only when the vignettes included emotions cues (Study 5 not Study 3). A possible reason for this difference is that intellectual stimulation is the least emotionally intense and positive of the four transformational leadership conditions (as was shown in Study 1 in Chapter 2). As a result, the addition of emotional cues were particularly important, and seemed to enhance the ability to identify intellectual stimulation.

4.5 Conclusion

While scholars have questioned the multidimensional nature of transformational leadership, the need for experimental studies in controlled laboratory settings assessing these core propositions looms large. Using vignettes (which maximized internal validity) across four studies, and implementing pilot studies to ensure construct validity, two consistent findings emerged. First, some transformational leadership dimensions are more readily identified and differentiated (viz. inspirational motivation and idealized influence) than others (viz. individualized consideration and intellectual stimulation). Second, emotion recognition skills enhance the ability to identify inspirational motivation, idealized influence, and intellectual stimulation, but this effect was dependent on whether emotion cues were readily available to participants.
4.6 References


Table 4.1
Descriptive statistics and accuracy percentages, Study 4 (N=185)

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<th>IC %Correct</th>
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Table 4.2
Mean scores for transformational leadership dimensions, Study 4 (N = 185).

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<th>IC Ratings</th>
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Table 4.3
Accuracy in percentages broken down by emotion recognition mean split, Study 4 (N = 185)

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Table 4.4  
*Descriptive statistics for all Study 5 variables (N=177)*

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* p < 0.05  
**p < 0.01
Table 4.5
Mean scores for transformational leadership dimensions, Study 5 (N=115)

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**p < .01
Table 4.6
Mean scores for transformational leadership dimensions broken into high and low emotion recognition, Study 5 (N=115)

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Table 4.7
Comparison of results from Study 2 and 3 with Study 4 and 5

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<td>Study 5 (MLQ)</td>
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</table>

* ✓ = Supported, ✕ = Rejected, Id = Identify, Diff = Differentiate, ER = emotion recognition, FC = forced choice, SS = sliding scale, MLQ = multifactor leadership questionnaire
Chapter 5

Differentiating the Magnitude of Transformational Leadership:

The Roles of Follower Emotion Recognition and Positive Mood
5.1 Introduction

In this chapter I turn my attention to the magnitude of leadership. “Magnitude” in this sense refers to a combination of the number of different behaviours a leader enacts, as well as the positivity and intensity of the leaders’ emotional expressions. Thus, low magnitude transformational leadership refers to a limited number of transformational behaviours exhibited with low intensity and neutral or low positive emotions. In contrast, high magnitude transformational leadership is evidenced by a range of transformational leadership behaviours, accompanied by intense and positive emotional expressions. The goal of this study is to establish (1) whether followers can identify differences in the magnitude of transformational leadership (as opposed to the dimensions of transformational leadership, which was the focus of Studies 2-5), and (2) if follower differences moderate this effect.

To accomplish this goal I conduct an experimental study using video vignettes, providing a constructive replication of the previous studies. In video vignettes, the leader provides far more emotion cues, both verbally and non-verbally (i.e. facial gestures, tone, and posture), than in either the Chapter 3 or 4 studies.

Magnitude of Transformational Leadership

Below I discuss four possible relationships between the magnitude of transformational leadership and the perception of transformational leadership.

A Linear Relationship

One possibility is there is a linear relationship between the magnitude of transformational leadership and the perception of transformational leadership, such that witnessing small amounts of transformational leadership will be associated with the leader being perceived as slightly transformational, while witnessing a large amount of transformational leadership will be
associated with the leader being perceived as very transformational. This linear relationship between the magnitude of transformational leadership enacted and the perception of transformational leadership is depicted in Figure 5.1.

This is implicitly the dominant way in which leadership scholars conceptualize leadership (Barling, 2014). A recent study that reflects this linear perspective was conducted by Tepper and colleagues (2018), who investigated the effects of varying amounts of transformational leadership on followers’ affect. They considered the amount of transformational leadership followers needed as well as how much they actually received on a daily basis and found that followers’ positive affect was higher when there was a fit between the amount of transformational leadership needed and received. They also found that where this fit existed, higher levels of reported transformational leadership were positively associated with followers’ higher positive affect. Yet this study focused on the effects of transformational leadership, rather than perceptions of leadership, and so did not answer the question of whether followers can differentiate between varying magnitudes of transformational leadership.

**Nonlinear Relationships**

**Negative Growth Curve Model.** A second possibility is that followers only need to witness a small amount of transformational leadership to assume that a leader is transformational. Figure 5.2 plots this relationship. The underlying assumption is that small actions, in this case a small display of transformational leadership, can be highly noticeable.

The concept of the power and perceptibility of small actions has not been widely considered within micro-organizational behaviour or psychology, and especially not within the field of leadership. Different leadership theories, especially positive leadership theories, still emphasize ‘big’ behaviours. Taking transformational leadership as one example, based on how it
is described, it might appear that good leaders must be able to motivate followers, influence others by being morally consistent, always be considerate of others, and stimulate followers intellectually. Any leader confronting this list of requirements would be forgiven for being overwhelmed by the time, commitment, and energy required to enact all of these behaviours. Yet, *constantly* being inspiring, influential, considerate, and cognitively stimulating may not be a requirement of good leadership if indeed followers perceive small levels of transformational leadership.

Although not extensively researched within existing leadership research, some researchers have examined how varying amounts of leadership behaviours affect individuals. One example of this research was conducted by Grant and Gino (2010). They examined the relationship between gratitude expressions and prosocial behaviour, and showed that small amounts of gratitude can be sufficient to create large differences in prosocial behaviour. Their experimental design was elegant and effective. When participants signed up for the research they were provided with a (unknown to them) fictional student’s cover letter, asked to provide the student with feedback, and then to send their feedback to the student. The actual manipulation occurred when the fictional student (the authors) responded with emails thanking the participants for their feedback, and asked them if they would be willing to help with a second cover letter. The only difference between the control condition and the experimental condition was the addition of eight words for the experimental condition: “Thank you so much! I am really grateful”. By adding these additional eight words, participants who received a gratitude expression were significantly more likely to provide feedback on the second cover letter. Such a seemingly small action was evidently noticeable as it had a large impact.
Positive Growth Curve Model. A third possibility is that leaders need to display a high magnitude of transformational leadership in order for followers to detect the behaviour. Under this model, followers would not detect small and medium displays of transformational leadership, but would only notice overt and intense displays. If this were the case, the relationship between magnitude of transformational leadership and ratings of transformational leadership would also be nonlinear but would take the shape of a positive growth curve model (see Figure 5.3).

No Relationship

Consistent with theory development from previous chapters, there is also a fourth possibility, which is that there is no direct relationship between magnitude and identification of transformational leadership. Identification may only become apparent when follower differences are taken into account (as will be discussed below).

Thus there are four competing ideas. (1) As leaders exhibit more transformational behaviours they will be viewed as more transformational. (2) Small displays of transformational leadership may be sufficient for followers to infer that leaders are transformational. (3) Only leaders exhibiting a high level of transformational leadership are perceived as being transformational. (4) There is no relationship between the magnitude and identification of transformational leadership. As there is no compelling conceptual basis or empirical findings to favour any one of these four explanations, no formal hypothesis is offered.

Follower Differences

Not all followers may be able to perceive subtle differences in the magnitudes of transformational leadership. Instead, I posit that follower differences may either enhance or diminish their ability to differentiate magnitudes of leadership (depending on the follower
One follower trait that may act to enhance differences in magnitude is emotion recognition. Following the previous four studies, I predict that follower emotional recognition will affect followers’ ability to differentiate between varying magnitudes of transformational leadership. Individuals skilled at emotion recognition are better able to notice and classify the emotions of others (Salovey & Mayer, 1990), and this ability affords them a more complete and accurate set of information upon which to make perceptions of others’ behaviours. Followers able to correctly recognize emotions should be better equipped to identify small nuances in the positivity and intensity of leaders’ verbal and non-verbal emotional expressions. The results of the previous four studies suggest that followers may be able to use this information to identify the amount of leadership they witnessed.

Hypothesis 1: Followers’ skill at recognizing emotions will positively affect their ability to identify small expressions (magnitudes) of transformational leadership.

There are other follower differences beyond emotion recognition that could affect the ability to differentiate between magnitudes of transformational leadership. While I expect emotion recognition to heighten the ability to discern small expressions of transformational leadership, there are also follower differences that might reduce this ability. One such trait is followers’ positive mood, which I propose will reduce the likelihood that followers will distinguish between different magnitudes of transformational leadership. This is based on the theoretical argument that affective states have an affect-congruent effect on judgements; prior research shows that people perceive and recall information and memories that are congruent with their current mood state (Forgas & George, 2001). Positive mood is linked to positive judgements and negative mood is linked to negative judgements (Gasper & Danube, 2016). Examples of this phenomenon include studies that show people in positive moods rate job
applicants higher than people in bad moods (Baron, 1987), that mood affects grading practices (Brackett, Floman, Ashton-James, Cherkasskiy, & Salovey, 2013), and that followers’ mood impacts their ratings of leadership effectiveness (Bono & Ilies, 2006).

As of yet, there is no research that has examined how followers’ mood influences whether followers distinguish between different magnitudes of transformational leadership. Based on the general evidence that mood influences judgement, I predict that followers’ positive mood will affect how transformational leadership is perceived and in turn rated. Followers’ positive mood will increase the recall of positive leadership behaviours, and so will inflate the ratings of transformational leadership in the low magnitude condition. This will act to minimize differences between the three magnitude conditions. Thus I hypothesize:

Hypothesis 2: Followers’ positive mood will negatively affect their ability to identify the magnitude of transformational leadership.

5.2 Study 6 – Method

Overview

This study was conducted in a laboratory setting and used three different video vignettes to manipulate leader behaviours and emotional expressions. There were three different levels of magnitude: (1) low, (2) medium, and (3) high transformational leadership. The three different videos were similar in content except for the leadership behaviours and the positivity and intensity of the leaders’ emotional expressions (both verbal and nonverbal).

Manipulation of Leadership Behaviours

Script development. The three levels of leadership magnitude were manipulated in scripts that the confederate recited in the video message. I developed the scripts based on

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7 A 2005 study by Brown and Keeping found that followers’ mood did not affect the factor structure of transformational leadership. That study was focused on the multidimensionality of transformational leadership, while my study is focused on the perception of different magnitudes of transformational leadership and so they are conceptually different.
transformational leadership theory and Christie, Barling & Turner’s (2011) manipulation of general transformational leadership.

**Script content.** All three scripts portrayed a leader describing an initiative to increase mindfulness at work to his work team. To ensure a fair comparison (Cooper & Richardson, 1986) it was important to ensure that there were equal differences between the low and medium magnitude conditions, and the medium and high magnitude conditions. To accomplish this experimentally, I manipulated the number of transformational leadership behaviours included, and the positivity and intensity of the leader’s behaviours and emotional expressions. The scripts are included in Appendix F.

**Piloting scripts.** I subjected the scripts to peer review in two separate pilot studies, sampling organizational behaviour graduate students who were asked to rate how positive the leadership was in each of the scripts. Ten graduate students read each script, with the order randomized, and were asked to rate how positive each script was using a three-point scale where 1 = low positive, 2 = medium positive, and 3 = very positive. In the first pilot study, the low positive leadership condition was rated as 2 (SD = 0.67), the moderately positive condition was rated as 1.8 (SD = 0.63), and the positive condition as 3 (SD = 0).

To enhance the differences between the low and medium conditions, I adjusted the scripts by removing some of the leadership behaviours and changing the descriptors to be more neutral in the medium condition. I then conducted a second pilot study using the same method. The same ten graduate students rated all three videos (low condition: \( M = 1.4 \) \( SD = 0.53 \), medium condition: \( M = 1.7, SD = 0.50 \), and high condition: \( M = 3, SD = 0 \)). These results were close to the desired scores for the conditions (low = 1, medium = 2, and high = 3). Based on these results,
minor adjustments were made to the low and medium scripts to maximize the between group differences.

*Confederate training and video creation.* Using a similar methodology to that used in several previous laboratory experimental studies (e.g. Christie et al., 2011; Robertson & Barling, 2017), I manipulated leadership behaviours using a trained confederate, who was compensated for his time. I only recruited one confederate to control for potential between-individual differences across multiple confederates. I conducted an in-person training session, during which the confederate learned about the nature of transformational leadership, and how to enact differing magnitudes of transformational leadership.

The scripts were read aloud by the confederate and recorded on video. The confederate did not need to fully memorize the scripts as they could be read from a teleprompter during filming to ensure he adhered to the planned script, however the confederate was provided with the scripts before filming to allow for practice and familiarity. Videos for each of the three conditions were made in a corporate setting that was unfamiliar to the undergraduate study participants. Videos were edited using iMovie.

**Participants & Recruitment**

I used the participant pool at the Smith School of Business. The sample consisted of 76 participants\(^8\), who were on average 19.62 years old (SD = 1.37; 62% female). Participants were randomly assigned to the low (n = 26), medium (n = 27), or high magnitude condition (n = 23).

**Procedure**

The study was conducted on campus. The study was run in multiple sessions, in groups of between 15 and 20 participants. Participants were asked to bring their own laptops and

\(^8\) There were originally 83 participants, however seven did not complete the Emotion Recognition Index. The seven participants who did not complete the ERI were excluded from the study.
headphones so that they could watch the videos privately.

At the start of each session, participants received a brief overview of the study procedures. I started by informing participants that they would be watching a video of a real leader, and that they were to watch the video from the perspective of a follower of the leader. I then told the participants that the video was being made in collaboration with the organization BluEarth. I explained that BluEarth was partnering with the School of Business to implement a mindfulness initiative within their workplace, and they wanted to create a video to introduce the new initiative. I then mentioned that as part of the partnership the university was developing the videos, and this is why I as a researcher was testing the videos at the university. The participants were asked to watch the video and think about its overall quality and the messaging around mindfulness, as they would be reporting on this later. This was important as it diverted the participants’ attention away from the topic of leadership, instead focusing them on mindfulness, which is not relevant to the purposes of my study and thereby avoid biases arising from demand characteristics.

I intentionally used BluEarth as the company because it is a real company, and one that is invested in training their employees. There was a low likelihood that students would recognize the company, however if they ran a Google search of the company during the study they would find an actual organization, increasing the credibility of the manipulation. To control for differences in knowledge about the organization, I asked the following question at the end of the survey: “Prior to this study, had you ever heard of the company BluEarth?” No participant had heard of BlueEarth beforehand. In the debrief, which was sent to every participants, I made it clear that BluEarth was not actually involved in this study in any way.

Once the introduction was complete participants opened an online link, which took them
to the letter of information and consent form. From there participants were randomly assigned to watch only one video. They had the opportunity to pause or rewind the video at any point. Once finished watching the video, participants completed the survey, the last part of which contained the test of emotion recognition.

**Manipulation check.** The manipulation check is central to this study, and was completed by participants at the end of the survey but before the test of emotion recognition. Participants were asked to rate how positive, as well as how intense the leadership behaviours were in the video they watched. There should be significant differences on positivity and intensity between the three conditions.

**Measures**

**Transformational leadership.** I measured transformational leadership using the Multifactor Leadership Questionnaire (MLQ) (Bass & Avolio, 2000). The 20 items measure inspirational motivation (4 items), idealized influence (8 items), individualized consideration (4 items) and intellectual stimulation (4 items). Participants were asked to rate how often the leader in the video engaged in each of the behaviours. The items were measured on a 5-point Likert scale, where 1 = not at all and 5 = frequently, if not always. The items from each of the four dimensions were aggregated to create an overall measure of transformational leadership. The reliability for transformational leadership was α = .885.

**Mood.** Mood was measured using the Positive and Negative Affect Schedule (PANAS) (Watson, Clark & Tellegen, 1988). The scale has 20 emotion terms which participants score on a scale from 1 to 5, such that 1 = very slightly or not at all, and 5 = extremely. Participants were asked what they were presently feeling (“indicate to what extent you feel this way right now, that is, at the present moment”). Mood was divided into positive affect and negative affect, with 10
items each. However I only used the positive mood score. Examples of positive mood items include ‘interested’ and ‘excited’. The reliability for positive affect was $\alpha = .891$.

**Emotion Recognition.** I again used the Emotion Recognition Index (ERI) (Scherer & Scherer, 2011), which I describe in earlier chapters. I created an overall emotion recognition score by combining the facial and vocal scores. The two scores were significantly correlated ($r(76) = 0.313$, $p < .01$).

**Manipulation Check.** Two items were included as a manipulation check. Participants were asked to rate how positive the leader was, and how emotionally intense the leader was in the video. Each of these items were scored on a 5-point Likert scale. The scoring ranged from 1 = not at all positive/intense, to 5 = extremely positive/intense, respectively.

**Data Analysis**

The data were analyzed using one-way analyses of variance (ANOVAS) and multiple regression. The ANOVA was used to determine whether there were between-group differences in positivity, intensity, and mood.9

Two hierarchical linear regressions were conducted. The first regression tested whether the manipulation of magnitude affected perceptions of transformational leadership. There were two stages within the regression, with participants’ age and gender entered first and magnitude of transformational leadership entered second.

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9 I tested whether participants’ mood influenced their ratings of transformational leadership. Participants’ mood was measured after they had rated transformational leadership so I needed to establish that participants’ mood was not a function of the leadership manipulation. To do this I computed a univariate ANOVA in which positive mood was compared across the three positive leadership conditions. There were no significant differences for positive mood: ($F (2, 73) = 1.163$, $p = ns$) (low: $M = 2.84$, $SD = 0.85$, medium: $M = 2.66$, $SD = 0.77$, high: $M = 2.51$, $SD = 0.66$). These non-significant findings suggest that the leadership conditions did not have an effect on followers’ mood. Therefore the effect of participants’ positive mood on their perceptions of transformational leadership can be examined.
The second regression analysis tested the effect of follower affective differences (i.e., emotion recognition and mood) on the ability to differentiate between magnitudes of transformational leadership. In this regression there were three stages. Participants’ age and gender were entered at stage one, participants’ positive mood and emotion recognition were entered at stage two, and magnitude of transformational leadership (i.e. the condition) was entered at stage three.

5.3 Results

All analyses were conducted using SPSS version 24. Descriptive statistics for all variables are presented in Table 5.1.

Manipulation check

I conducted two manipulation checks to ensure the internal validity of the magnitude of transformational leadership intervention. As expected there were significant differences between the three magnitude conditions in terms of positivity ($F(2, 73) = 5.511, p = 0.006$) and intensity ($F(2, 73) = 3.651, p = 0.031$). These results are presented in Table 5.2.

Differentiation between magnitudes of transformational leadership

The first step of the main analysis was to determine whether participants rated transformational leadership differently based on the magnitude manipulation. This was tested using a hierarchical regression with age and gender included in the first step, and condition included in the second step (see Table 5.3). Neither the first ($F(2,73) = 0.623, p = ns$) nor second step ($F(3,72) = 1.528, p = ns$) were significant; and none of the separate predictor variables were associated with transformational leadership, suggesting that followers did not differentiate between low, medium, and high levels of transformational leadership.
Differentiation between magnitudes of transformational leadership: Follower differences included

I recomputed the analysis conducted above, but included the follower differences of positive mood and emotion recognition in the third step of the analysis (see Table 5.4). Introducing the follower difference variables in Step 2 now explained an additional 11.4% of variation in transformational leadership ($F(4,71) = 2.666, p = 0.39$). Followers’ positive mood significantly predicted transformational leadership ($\beta = 0.335, p = 0.006$), while followers’ emotion recognition ($\beta = 0.131, p = ns$) did not.

Step 3, which included the magnitude intervention, explained another 6.2% of the variance of transformational leadership ($F(5,50) = 3.329, p = 0.009$). Followers’ positive mood remained a significant predictor of transformational leadership ($\beta = 0.375, p = 0.002$). The condition variable (i.e. magnitude) was also a significant predictor of transformational leadership ($\beta = 0.253, p = 0.024$). However, followers’ emotion recognition ($\beta = 0.107, p = ns$) was still non-significant. Thus Hypothesis 1 is rejected and Hypothesis 2 is supported.

5.4 Discussion

In this study the magnitude of transformational leadership was manipulated, such that a leader either exhibited a small, medium, or large level of transformational leadership in separate video vignettes. Followers successfully differentiated the three conditions by how positive and intense the leader was in each, but they were unable to differentiate between the magnitudes of transformational leadership displayed. In this study, there was no relationship between magnitude of transformational leadership and the rating of transformational leadership. This is in keeping with the findings from the previous two chapters, in which participants could not consistently identify or differentiate all of the transformational leadership dimensions.
The second question was whether follower affective differences would influence the relationship. Indeed, once follower emotional characteristics were accounted for, participants did differentiate between the magnitudes of transformational leadership. While followers’ emotion recognition had no effect, followers’ positive mood was a significant predictor of transformational leadership. The more positive a follower’s mood, the higher the follower rated transformational leadership, which is consistent with previous research showing that positive mood impacts peoples’ judgments. Importantly, once the variance of followers’ positive mood was accounted for, the magnitude of leadership predicted ratings of transformational leadership, suggesting that when followers’ mood is excluded, followers can differentiate between small, medium, and large amounts of transformational leadership. This supports the fourth possibility I proposed for the relationship between magnitude of transformational leadership and perceptions of transformational leadership, such that there is no relationship until follower differences, in this case positive mood, are included. Once mood is taken into account, the relationship between magnitude and perception of transformational leadership becomes linear (see Figure 5.1).

**Strengths and Limitations**

There were several strengths within the study. First, this study was based on a randomized experiment, enhancing internal validity. By creating scripts I was able to directly manipulate the amount of transformational leadership present in each condition. I also ensured that there were equivalent differences between the low and medium magnitude conditions and between the medium and high magnitude conditions, which allowed for a fair comparison between the magnitudes.

A second major strength of this study was the use of video vignettes, which provided more ecological validity than written vignettes. Depicting leadership in videos was a more
natural way to display leadership, with more emotional information embedded than the written vignettes used in previous studies. Indeed there were nonverbal cues, such as posture, tone and facial gestures in the videos, as well as multiple descriptive statements such as “I am happy to say…” and “I absolutely believe in you”, which participants could use to interpret the leader’s emotions and the leadership behaviours they witnessed.

Third, by including follower mood in addition to emotion recognition, I expanded the emotional traits and characteristics that could explain when and why followers do or do not differentiate between different magnitudes of transformational leadership. This study was therefore an extension of the previous studies.

Like all research, there were also limitations inherent within the study. One limitation was that transformational leadership was only considered as a unidimensional construct. I did not separately test whether followers could differentiate between the magnitudes of the four dimensions. This is not consistent with how I conceptualized transformational leadership in the last few chapters. The scripts in this study were not originally developed to have an equal variation in the magnitude of each of the four dimensions, as a result of which experts never rated whether the magnitudes of the dimensions varied between the three conditions during pilot testing.

A second limitation was the measurement of participants’ positive mood. Positive mood was measured after participants watched the video rather than before, which meant that the videos could have affected participants’ mood. However, I showed that positive mood was not affected by the magnitude manipulation, as a result of which positive mood was used as a moderator. Nonetheless, future studies investigating the effect of follower mood on perceptions of leadership should measure mood before leadership.
Additionally, there is a possible concern relating to fair comparisons. While results of the manipulation check showed that the conditions were significantly different on positivity and intensity, these results were driven by the low condition being significantly different from the medium ($t(51) = 2.270, p = 0.027$) and high condition on positivity and intensity ($t(47) = 3.213, p = 0.002$). The medium and high condition were not significantly different from one another ($t(48) = 0.959, p = ns$). Full support for a fair comparison would ideally require that there should be equal differences in positivity and intensity between each of the conditions.

5.5 Conclusion

The core finding from this study highlights the importance of followers’ characteristics: In general, followers could not differentiate between low, medium, and high amounts of transformational leadership. However, once followers’ positive mood was accounted for, followers were able to differentiate between the different magnitudes of transformational leadership. Thus, this study supports that there is a linear relationship between the magnitude of transformational leadership and the resulting perceptions of transformational leadership, but only when follower differences are accounted for. The results also suggest that small leadership behaviours can be quite noticeable. It does not necessarily take dramatic displays for followers to perceive leaders as transformational.
5.6 References


Figure 5.1
*Linear relationship between the magnitude of TFL and TFL scores*
Figure 5.2
Negative growth relationship between the magnitude of TFL and TFL scores
Figure 5.3
Positive growth relationship between the magnitude of TFL and TFL scores
Table 5.1

*Descriptive statistics for all study variables (N= 83)*

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*p < 0.05, **p < 0.01
Table 5.2
Analysis of variance between conditions for manipulation check (N=83)

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*p < 0.05, ** p < 0.01
Table 5.3
Linear Regression Analysis for Magnitude Predicting Transformational Leadership (N = 76)

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<tr>
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<td></td>
<td>3.299</td>
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Note. There were no significant findings
### Table 5.4
Hierarchical Regression Analysis for Variables Predicting Transformational Leadership (N = 76)

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<td>5.330*</td>
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*p < .05, **p < .01
Chapter 6

Testing the Factor Structure of Transformational Leadership:

The Roles of Followers’ Emotion Recognition and Liking of their Leader
6.1 Introduction

Thus far, using a series of experimental studies I have shown that one particular individual difference, namely followers’ emotion recognition, can influence the way in which followers’ perceive and identify the dimensions of transformational leadership. My goal in the current chapter is to replicate and extend those studies by [a] focusing on both follower emotion recognition and followers’ liking of their leaders, and [b] testing my hypotheses using a different method. Rather than using vignettes (in either a paper or video format) I now focus on real followers rating their actual leaders. Full time employees were sampled, and asked to rate their own leaders. This is important as it means that participants in the current study have an additional set of emotional cues derived from their actual relationships with leaders, and have preexisting impressions of their leaders. I conduct a series of confirmatory factor analyses to investigate whether transformational leadership is unidimensional or multidimensional, and to test the role of the two follower differences on the factor structure of transformational leadership.

Factor Structure of Transformational Leadership

As has been discussed at length in the previous chapters, a multidimensional model of transformational leadership should theoretically provide a better fit than a unidimensional model. This is grounded in Bass’s original conceptualization of transformational leadership (Bass, 1985), and there is some support for this including the findings from Studies 1-5, and evidence from confirmatory factor analyses comparing many different models of transformational leadership (Avolio, Bass & Jung, 1999). However, most research on the factor structure of transformational leadership provides support for a unidimensional model. The central idea of my thesis is that the factor structure of transformational leadership is multidimensional when follower affective characteristics are included in the model.
Role of Followers’ Emotion Recognition

The first goal of the study is to replicate the results from Studies 2-5 regarding the effects of follower emotion recognition, using a different methodology. Studies 2-5 provided mixed support for the notion that those followers who are better at recognizing emotions are also better at correctly identifying the transformational leadership they observe (they were better at identifying inspirational motivation, idealized influence, and intellectual stimulation but not individualized consideration, and the findings were method bound). As a result, I predict that a unidimensional model of transformational leaders will characterize followers who are less skilled at emotion recognition. Conversely, followers more skilled at recognizing emotions should be able to differentiate between the transformational leadership behaviours of their leaders, which would be reflected in a multidimensional (four-factor) model of transformational leadership. I therefore hypothesize that:

H1: Follower emotion recognition will moderate model fit such that a four-factor model of transformational leadership will provide a better fit to the data than a one-factor model for participants with high versus low emotion recognition.

Role of Followers’ Liking of Leader

So far, I have assessed whether emotion recognition affects followers’ ability to identify and differentiate between the four dimensions of transformational leadership. Of course, emotion recognition is not the only emotional individual difference that might play a role. I propose that followers’ liking of their leaders will function in the opposite direction of emotion recognition, and negatively affect the ability of followers to identify and differentiate between the four transformational leadership dimensions. Followers’ liking of their leaders will act as a halo, and conceal nuances between different transformational leadership behaviours.

Halo effect, also known as halo error, is a well-documented phenomenon introduced by
Nisbett and Wilson (1977), which they defined as “the influence of a global evaluation on evaluations of individual attributes of a person” (p 250). The construct has now been further developed and there are three main forms of halo effect: a general impression model (an overall impression influences the ratings of specific behaviours), a salient dimension model (the assessment of one trait influences the assessment of other traits), and an inadequate discrimination model (no difference made between conceptually distinct behaviours) (Fisicaro & Lance, 1990). While all of these models of halo effect could influence the ratings of transformational leadership, the most relevant halo effect for this study is the general impression model. Under this model, people rating performance (or leadership) are influenced by their general impression of the ratee (Fisicaro & Lance, 1990). The general impression of interest for this study is interpersonal affect (i.e. liking).

When followers like their leaders, they may assume that because their leaders engage in one aspect of transformational leadership, they engage in all aspects of transformational leadership (Nisbett & Wilson, 1977). Followers form global assessments of their leaders, rather than perceiving their leaders’ specific behaviours. This is supported by findings showing that people do not fully rely on recall of behaviours when rating leadership (Baltes & Parker, 2000; Cardy & Dobbins, 1986), and that followers’ liking of their leaders is significantly related to their leadership ratings (Dulebohn, Wu & Liao, 2017; Engle & Lord, 1997; Liden, Wayne, & Stilwell, 1993). This global assessment becomes a halo effect. The presence of a halo effect has previously been suggested as a core reason for high correlations between the transformational leadership behaviours (e.g. Lievens, van Giet & Coetsier, 1997).

Brown and Keeping (2005) tested the effects of followers’ liking of leader on followers’ perceptions of transformational leadership. Using a confirmatory factor analytic approach, they
showed that including followers’ liking of leader as a method factor significantly reduces the intercorrelations among the transformational leadership dimensions. Their results provided support for a five dimensional model of transformational leadership (viz. (1) idealized influence attributional, (2) idealized influence behavioural, (3) inspirational motivation, (4) individualized consideration, and (5) intellectual stimulation), and showed that liking was a significant source of variance in leadership ratings. Within their study followers’ liking of leader was considered a ‘target-specific affect’. Using similar analytic procedures, I replicate their findings by testing the effects of followers’ liking of leader, which I consider a halo effect, within my conceptualization of the emotionally-valenced four-dimensional model of transformational leadership. I propose that when the halo effect is accounted for when using confirmatory factor analyses, support for a multidimensional model will emerge.

**H2: Followers’ liking of their leaders will moderate model fit such that a four-factor model of transformational leadership will provide a better fit to the data than a one-factor model, when followers’ liking of their leader is included in the model.**

### 6.2 Study 7 - Method

**Design**

In this study I investigate pre-existing impressions of their leaders by full time employees, and so a vignette design was inappropriate. Therefore I conducted a survey of adults employed on a full-time basis who reported on their actual leaders’ behaviours, rated on the Multifactor Leadership Questionnaire (Bass & Avolio, 2000), as well as reporting how much they liked their leaders. Afterwards, participants’ ability to recognize emotions was tested.

**Participants**

The study was again conducted using ClearVoice to recruit participants who were employed full-time (>30 hours per week), lived in North America, and who had a direct
leader/supervisor. 347 people participated\(^\text{10}\), of whom 61% were female, and the average age was 46.08 years old (\(SD = 11.34\)). Participants had worked with their leader on average 6.14 years (\(SD = 6.61\)).

**Measures**

*Transformational Leadership* was again measured using 20 items from the Multifactor Leadership Questionnaire (MLQ) (Bass & Avolio, 2000). The items were scored on a 5-point Likert scale (1 = not at all, 5 = frequently or always). The reliabilities of the dimensions were as follows: inspirational motivation \(\alpha = .898\), idealized influence \(\alpha = .915\), individualized consideration \(\alpha = .862\), and intellectual stimulation \(\alpha = .840\).

*Liking of Leader* was assessed using Brown and Keeping’s (2005) four-item scale (e.g., “I get along well with my supervisor”). Each of the four items were scored on a 5-point Likert scale (1 = *strongly disagree*, 5 = *strongly agree*). The reliability of the liking items was \(\alpha = .940\).

*Emotion recognition.* To test followers’ emotion recognition I used a combination of the facial and vocal scores from the Emotion Recognition Index (ERI) (Scherer & Scherer, 2011). The facial component of the test had 30 pictures, with participants indicating which emotion was exhibited in each picture (either joy, anger, sadness, fear or disgust). The vocal component consisted of 30 audio clips, which participants listened to and indicated whether the emotion expressed was joy, anger, sadness, fear, or if they were emotionally neutral. The two scores were significantly correlated (\(r = .301, p < .01\)).

**Data Analysis**

The factor structure of the MLQ was tested using confirmatory factor analyses (CFAs), with covariance matrices as inputs, as implemented in MPlus version 8 (Muthén & Muthén, 2010).

\(^{10}\) There were 769 participants who completed the initial portion of the survey but 422 participants failed to either start or complete the ERI. The participants who did not complete the study were 69% female and the average age was 45.14, SD = 11.033.
I used two different approaches to understand the role of emotion recognition and liking/halo because followers’ emotion recognition and the halo effect should have opposite effects on model fit, such that followers’ emotion recognition ability increases distinctions between the transformational leadership dimensions while liking of leader obscures distinctions between the dimensions. All model tests used Maximum Likelihood estimation as implemented in Mplus 8 (Muthén & Muthén, 2017).

**Emotion Recognition Models.** In order to test the effects of followers’ emotion recognition, I conduct a series of confirmatory factor (CFA) analysis to compare the fit of a one-factor model and a four-factor model of transformational leadership, between groups of individuals who are lower vs. higher in emotion recognition ability (Muthen & Muthen, 2017, p. 80-81). The two groups were generated by creating a mean split of followers’ emotion recognition score, based on their facial and vocal scores from the Emotion Recognition Index ($M = 62.11, SD = 8.88$).

First, CFA’s for the high emotion recognition group and the low emotion recognition group were calculated for both a one-factor a four-factor model of transformational leadership. The fit of the one-factor model was compared to the fit of the four-factor model for both groups. Fit will be deemed acceptable where RMSEA < 0.08, CFI $\geq 0.95$, and TFL $\geq 0.95$ (see Hooper, Coughlan & Mullen, 2008). As the groups are not nested (the low and the high emotion recognition groups are completely separate samples), it is not possible to compare the fit of the models between the high and low emotion recognition groups using $\chi^2$ difference tests. However the fit index RMSEA is standardized and so is used to compare between models.

**Halo Effect Models.** For the set of confirmatory factor analyses that included follower liking of leader, I estimate three models. The first model (Model A) estimates a unidimensional
structure in which all MLQ items are hypothesized to load on a single, unidimensional transformational leadership factor (see Figure 10). A second model (Model B) hypothesizes four substantive leadership factors (i.e., inspirational motivation, idealized influence, individualized consideration, and intellectual stimulation) and a fifth factor representing liking of leader; the four leadership factors are allowed to intercorrelate, with the fifth factor constrained as orthogonal to the leadership factors to preserve the nesting sequence (see Figure 11). Finally, the third model, Model C, replicates the Model B structure but adds loadings from the fifth factor (liking of leader) to each of the leadership items, creating a method factor (see Figure 12). A method factor represents common method variance, which reflects error that is a function of the method or source of measurement (Richardson, Simmering & Sturman, 2009). Model C thus provides a test of the hypothesis that a four-factor model of transformational leadership will fit the data better than a one-factor model when liking of leader is included as a method factor (i.e. controlled).

To evaluate the difference in fit between the nested models, I conduct $\chi^2$ difference tests (Bollen & Long, 1992).

6.3 Results

Descriptive statistics for all study variables appear in Table 6.1.

**Follower Emotion Recognition as a Method Factor**

To test the effect of emotion recognition on the factor structure of transformational leadership, I conducted a mean split of emotion recognition ($M = 62.11$, $SD = 8.88$, Range = 18.50 – 86.50, $N_{\text{high}} = 180$, $N_{\text{low}} = 167$). Those participants who scored exactly on the mean were included in the high emotion recognition group, which is why there is the difference in the sizes of the two groups.
A one-factor model of transformational leadership was compared to a four-factor model of transformational leadership for both the high and low emotion recognition group separately. See Table 6.2 for fit indices. None of the models had a good absolute fit, which is not uncommon when using confirmatory factor analysis (Kelloway, 1995). However, across both the high and low emotion recognition groups, the four-factor model provided a significantly better fit than the one-factor model (high: $\Delta \chi^2 (6) = 59.891, p < .001$; low: $\Delta \chi^2 (6) = 56.462, p < .001$ respectively).

Additionally, comparing the standardized fit index of RMSEA, the four-factor model from the high emotion recognition group provided the best fit of any of the four models. This supports H1.

**Supplementary Analyses**

As the use of a mean split is a subjective cutoff point, I conducted an additional multi-group comparison using a different cutoff. I again created two groups, a high and a low emotion recognition group, based on those in the top and bottom third of emotion recognition scores. In this set of analyses neither the one-factor nor four-factor model in either the high or low emotion recognition group provided a good overall fit to the data. However, a four-factor model still fit better than a one-factor model for the high and low emotion recognition groups. See Table 6.4 for the fit indices. As these results follow the same pattern as the results from the mean split, further support is provided for Hypothesis 1.

**Follower Halo Effect as a Method factor**

Standard goodness of fit indices for the three substantive models testing a one-factor, four-factor, and four-factor plus a method factor model of transformational leadership, are presented in Table 6.5. As can be seen from Table 6.5, the four-factor model that included liking of leader as a method factor provided a significantly better fit than the other two models. Specifically, the method factor model (Model C) provided a better fit than the four-factor
constrained model (Model B) ($\Delta \chi^2(20) = 723.588, p < .001$), and a better fit than the one-factor model (Model A) ($\Delta \chi^2(27) = 848.531, p < .001$).

Last, the method factor model (Model C) approached a good absolute fit to the data (RMSEA = 0.071, CFI = 0.949, TLI = 0.938, SRMR = 0.031), supporting H2.

### 6.4 Discussion

There are two major findings from this study: First, follower differences matter in terms of how leaders are perceived, and second, a multidimensional model of transformational leadership is more appropriate than a unidimensional model.

**Effect of Followers’ Emotion Recognition**

Results of the multi-group confirmatory factor analyses show that followers’ emotion recognition influenced the factor structure of transformational leadership. In the high emotion recognition group a four-factor model of transformational leadership fit better than a one-factor model, although neither model had a good absolute fit. As the model fit was better for the high emotion recognition group than the low emotion recognition group (the higher group had a smaller RMSEA), it suggests that followers who had better emotion recognition were better able to differentiate between the transformational leadership dimensions more than the low emotion recognition group.

**Effect of Followers’ Liking of Leader**

When the halo effect is removed statistically, the four-factor model fit the data better than a unidimensional model, supporting the hypothesized four-factor model of transformational leadership. Thus followers’ pre-existing perceptions of their leaders hampered their ability to differentiate between the transformational leadership dimensions. These findings replicate Brown and Keeping (2005), who also showed that including followers’ liking of leader into the
model of transformational leadership provided the best fit. When followers’ liking of leader was included as a method factor Brown and Keeping found support for a five-factor model of transformational leadership. They divided idealized influence into its attributional and behavioural subcomponents, while I considered only the overall dimension of idealized influence, and so found support for a four-factor model of transformational leadership.

Overall the significant results for both follower emotional recognition and the halo effects highlight the importance of followers’ emotions and emotion-related differences. Not all followers perceive leadership in the same way. There are follower differences that can either act to mask or enhance the ability to perceive nuances in transformational leadership behaviours.

Moving forward, research focusing on the nature of transformational leadership needs to take followers into account, specifically differences in followers’ emotions and emotional abilities.

These findings provide more support for the multidimensional nature of transformational leadership, as well as for the effects of follower emotion recognition than did the experiments in the previous chapters. In the studies that manipulated leadership through written vignettes, emotion recognition only affected the identification of inspirational motivation, idealized influence and intellectual stimulation, while in this study follower emotion recognition affected the four-factor structure of transformational leadership. One explanation for these differences is the availability of emotion cues. In the first set of written vignettes, no emotional cues available, and the second set only contained limited information. In this study followers rated their actual leaders. These real leaders would exhibit a wide range of emotion cues, including verbal and non-verbal expressions (i.e. tone, posture, and facial gestures). These non-verbal cues were not present in the written vignettes. Followers would also have much more sustained (longer and more frequent) opportunities to recognize these emotional expressions.
Strengths and Limitations

A primary strength of this study was the ecological validity that was lacking from the experimental (vignette) studies. By having followers rate their actual leaders it was possible to investigate the effects of existing impressions and biases, specifically the extent to which followers liked their leaders, which would not be possible in a vignette design.

Nonetheless, this research is not without limitations. Again due to survey length and its online nature, it was not possible to measure more than one branch of emotional intelligence, representing a potential threat to the construct validity of emotional intelligence within the studies. A second limitation was the need to conduct a mean split based on emotion recognition scores. Typically when conducting multi-groups CFAs, groups are based on categorical data (e.g. gender, race, culture) with clear rather than arbitrary divisions (see Bieda et al., 2017 or Whisman et al., 2018, for recent examples). Grouping participants based on their emotion recognition scores reduced the variability in emotion recognition in each group, but it was the appropriate technique for the analyses.

6.5 Conclusion

A four-factor model of transformational leadership consistently provided better fit than a one-factor model after taking follower emotion recognition into account. The four-factor model provided a good absolute fit to the data when liking was statistically constrained. This research suggests that transformational leadership is multidimensional rather than a single overarching dimension of positive leadership. Thus, sufficient support exists for the multidimensionality of transformational leadership that research should continue clarifying its nature.
6.6 References


Figure 6.1
Unidimensional model of transformational leadership with liking of leader constrained
Figure 6.2
Four-factor model of transformational leadership with liking of leader constrained
Figure 6.3
Four-factor model of transformational leadership with liking of the leader as method factor
Table 6.1
Descriptive statistics for all study variables (N=347)

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<th>SD</th>
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<th>Gender</th>
<th>Tenure</th>
<th>IM</th>
<th>II</th>
<th>IC</th>
<th>IS</th>
<th>Liking</th>
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*p < 0.05, ** p < 0.01

IM = inspirational motivation
II = idealized influence
IC = individualized consideration
IS = intellectual stimulation
ER = emotion recognition
Table 6.2
*Fit indices for confirmatory factor analysis with mean split of emotion recognition*

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<th>df</th>
<th>χ²/df</th>
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<th>CFI</th>
<th>TLI</th>
<th>SRMR</th>
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<td>0.893</td>
<td>0.876</td>
<td>0.053</td>
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<tr>
<td>1-factor low ER</td>
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<td>0.872</td>
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<td>4-factor low ER</td>
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<td>0.111</td>
<td>0.900</td>
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N<sub>high</sub> = 170, N<sub>low</sub> = 180
Table 6.3
Fit indices for confirmatory factor analysis of the three models with liking of leader

<table>
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<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\chi^2$/df</th>
<th>RMSEA</th>
<th>CFI</th>
<th>TLI</th>
<th>SRMR</th>
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<td>1-factor</td>
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Table 6.4
Fit indices for confirmatory factor analysis split into the highest third and lowest third of emotion recognition index scores*

<table>
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<tr>
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<th>$\chi^2$</th>
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<th>$\chi^2$/df</th>
<th>RMSEA</th>
<th>CFI</th>
<th>TLI</th>
<th>SRMR</th>
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<td>4-factor low ER</td>
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<td>2.773</td>
<td>0.120</td>
<td>0.884</td>
<td>0.865</td>
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</tr>
</tbody>
</table>

$n_{\text{high}} = 97$, $n_{\text{low}} = 123$
Chapter 7
General Discussion and Conclusion

The primary goal of my thesis was to advance our understanding of the nature of transformational leadership. Across seven separate studies, I addressed (1) whether there are unique affective characteristics associated with each of the four sub-dimensions of transformational leadership (Study 1), (2) if followers perceive the multidimensionality of transformational leadership (Study 2, 3, 4, 5, and 7), and (3) if followers perceive differences in the magnitude of transformational leadership (Study 6). In six of the seven studies I also considered whether follower differences affect their ability to perceive the multidimensionality and differences in magnitude of transformational leadership. Studies 2-7 all examined the role of followers’ emotion recognition; Study 6 also examined the role of followers’ mood, and Study 7 additionally examined the role of followers’ liking of their leader. Four different methodologies were used across the studies, providing the basis for a series of replications and extensions. Taken together, these studies provide a novel and rigorous test of the nature of transformational leadership.

The affective nature of transformational leadership

Over the past few decades there has been a growing acknowledgement that leadership is an emotional process. Enacting leadership involves the display of emotions, and creates an affective response in both the follower and the leader (Gooty, Connelly, Griffith & Gupta, 2010). Numerous studies show that leaders who express positive emotions are more effective than leaders who display negative emotions (e.g. Newcombe & Ashkanasy, 2002). However, what remained to be investigated until now is the specific emotional characteristics of the four dimensions of transformational leadership. In my thesis I set out to determine the affective nature
of transformational leadership by exploring the affective nature of each of the four separate dimensions of transformational leadership.

In Study 1, three different samples rated the emotionality of the four leadership dimensions that form transformational leadership. Across all three samples, the four dimensions were perceived as involving positive and intense emotional expressions, which is consistent with previous research showing that positive leadership constructs are more associated with positive emotional expressions (Bono & Ilies, 2006; van Knippenberg & van Kleef, 2016). More importantly, the levels of positivity and intensity were significantly different for each of the four dimensions, with inspirational motivation being the most positive and intense of the four dimensions, and intellectual stimulation the least.

These findings suggest that transformational leadership is emotional, and that its sub-dimensions have distinct emotional characteristics. This is an important theoretical contribution as it provides a conceptual basis upon which the four dimensions of transformational leadership might be differentiated.

**The multidimensional nature of transformational leadership**

Since its emergence in the 1980s, the construct and measurement validity of the theory of transformational leadership has been criticized and questioned. Although some studies support the factor structure Bass (1985) originally proposed (e.g., Avolio, Bass & Jung, 1999), many others studies find that the dimensions are highly inter-correlated, and that a unidimensional model of transformational leadership provides the best fit (e.g. Deinert et al., 2015; Judge & Piccolo, 2004). The consistency of this finding is such that most research on transformational leadership now implements a unidimensional version of the construct.
A major goal of my thesis was to test the multidimensionality of the transformational leadership, and establish whether followers differentiate between inspirational motivation, idealized influence, individualized consideration, and intellectual stimulation. Initially this was tested using written vignettes, in which each of the dimensions was presented separately (Study 2-5). Findings from these studies were mixed as to whether followers could identify and differentiate between the dimensions. This varied by dimension such that participants were more consistent at identifying and differentiating inspirational motivation and idealized influence, whereas individualized consideration and intellectual stimulation were rarely identified and differentiated from the other dimensions. Ultimately, no matter what dimension participants were presented with, they rated all of the dimensions highly, suggesting there were not large distinctions made between them.

One plausible reason for any failure to identify and differentiate the four dimensions in previous research was that researchers had failed to take follower characteristics into consideration, and I hypothesized that followers’ emotion recognition would help them to perceive the multidimensionality of transformational leadership. Followers’ emotion recognition had an effect on the identification of inspirational motivation, idealized influence and intellectual stimulation, such that individuals with above average emotion recognition scores were better at identifying the transformational leadership dimensions than those scoring below average in emotion recognition.

While Studies 2-5 produced mixed support for the multidimensionality of transformational leadership, Study 7 provided robust support for the multidimensional nature of transformational leadership. In this study, participants – all of whom were working adults – rated their own leaders using the Multifactor Leadership Questionnaire (MLQ) (Bass & Avolio, 2000).
When followers’ liking of their leader was included as a method factor, a confirmatory factor analysis found that a four-factor model of transformational leadership provided a good absolute fit. This suggests that followers’ liking of their leader acts as a halo effect, and that once it is removed individuals accurately perceive each of the four separate dimensions. This is important because it supports the idea that transformational leadership is multidimensional in nature, and explains why other previous studies may not have found support for a four-factor model of transformational leadership.

I also tested the effect of emotion recognition on the structure of transformational leadership using a series of confirmatory factor analysis. The analyses established that in both the low and the high emotion recognition group a four factor model fit better than a one-factor model, and that model fit was best for the four-factor model in the high emotion recognition group. This indicates that followers’ emotion recognition did have some effect on the factor structure of transformational leadership.

One note about emotion recognition as it was used in Studies 2-5 and 7, is that across those studies emotion recognition was split into two groups: those with below average scores on the ERI and those with above average scores on the ERI. While there is the concern that the mean is an arbitrary cut-off, this is somewhat negated by the consistency of the mean emotion recognition scores across the studies (Study 2: \( M = 59.07, SD = 10.13 \), Study 3: \( M = 59.06, SD = 10.05 \), Study 4: \( M = 59.78, SD = 9.74 \), Study 5: \( M = 60.92, SD = 9.24 \), Study 6: \( M = 65.19, SD = 8.79 \), and Study 7: \( M = 62.11, SD = 8.88 \)). This helps to validate the use of a mean split of followers’ emotion recognition.

The most important contribution of the studies I have conducted is the conclusion that transformational leadership is not a construct so flawed that it must be abandoned. While the
dimensions were consistently highly related in all of the studies, some support emerged for the notion that followers could identify and differentiate between them, especially when follower differences were accounted for. These studies can be used to refute critiques made by scholars such as Yukl (1999) and van Knippenberg and Sitkin (2013), and suggest that continued research of transformational leadership is not misplaced.

**The magnitude of transformational leadership**

In addition to examining whether participants could differentiate between the dimensions of transformational leadership, I was also interested in examining whether participants could differentiate between varying magnitudes of transformational leadership. I was interested in whether there would be a linear or nonlinear relationship between the magnitude of transformational leadership and the incurring perception of transformational leadership. To investigate this question, I manipulated the magnitude of transformational leadership using video vignettes. Initially, there was no relationship between the magnitude of transformational leadership and the ratings of transformational leadership. However, after followers’ positive mood was controlled, the magnitude of transformational leadership significantly predicted participants’ ratings of transformational leadership. Thus when the masking effect of followers’ positive mood is removed, followers can perceive differences in the magnitude of transformational leadership.

An additional contribution of the studies I conducted is highlighting the importance of considering the follower in the leader-follower relationship dyad. In Studies 2-7, follower emotional traits were important for establishing either multidimensionality, or the identification of differences in magnitude. Follower emotional recognition enhanced followers’ ability to identify the transformational leadership dimensions of inspirational motivation, idealized
influence, and intellectual stimulation, while followers’ positive mood and liking of their leader masked the multidimensionality of transformational leadership, and so needed to be statistically controlled out.

In their call for increased attention to followership, Uhl-Bien and colleagues (2014) highlighted the numerous ways in which followership research could be expanded. The inclusion of followers’ emotional characteristics (emotional recognition, mood, and affective judgements) is one such future direction, and is a direction that would also benefit both the leadership literature as well as the emotions literature.

**Methodological Contributions**

In addition to the theoretical contributions of this dissertation, there were also several methodological contributions. When considering the results of all of the studies together, it becomes clear that how leadership was (1) witnessed and (2) measured, was important in how transformational leadership was perceived.

**How leadership is witnessed**

The first example of how the method of witnessing leadership affected outcomes came in Study 1. When participants read a vignette describing transformational leadership behaviours versus reading only written definitions/descriptions of the behaviours, they consistently rated the transformational leadership dimensions as more emotionally intense. The vignettes provided a richer description of the same behaviours, and this added detail increased followers’ perceptions of intensity.

The second example occurred in Studies 2-5 and Study 7. Comparing the results from Studies 2-5 (in which there was mixed support for the multidimensionality of transformational leadership) to those of Study 7 (where a multidimensional model of transformational leadership
received strong support), rating “real” people who provide a wide range of emotion cues and transformational leadership behaviours resulted in the strongest support for the multidimensionality of transformational leadership. In Studies 2-5 only hypothetical leader-follower relationships were studied. Using vignettes allowed for the manipulation of leadership, providing a high level of internal and construct validity, but at the cost of ecological validity. Support for the multidimensionality of transformational leadership, and the role of follower characteristics, was weaker when participants witnessed leadership by reading written vignettes. In contrast, actual leader-follower relationships were the focus of Study 7, and follower emotion recognition significantly affected the ability to distinguish between the four dimensions of transformational leadership.

One plausible explanation for these differences is the availability of emotion cues in actual vs. hypothetical relationships. In Study 7 followers rated their actual leaders, and would have enjoyed more frequent access to their leaders full range of emotion cues, including verbal and non-verbal (i.e. tone, posture, and facial gestures) expressions. Given the increase in behavioural and emotional information available to followers, it is not surprising that Study 7 would provide more conclusive support for the multidimensionality of transformational leadership, and the influence of emotion recognition on the perception of multidimensionality.

**How leadership is measured**

The results from Studies 2-5 also suggest that how leadership is measured is important. Participants were most likely to correctly identify the four transformational leadership dimensions when responding to a forced choice answer question, which made them choose only one dimension that best represented the behaviour they had read in the vignette. When participants rated the MLQ they were still able to identify the more intense dimensions of
inspirational motivation and idealized influence, but were less able to correctly identify individualized consideration and intellectual stimulation.

Additionally, follower emotion recognition only influenced the identification of the transformational leadership dimensions when participants rated the MLQ rather than responding to sliding scale items. The MLQ, which offers a more detailed measure of transformational leadership, provided a better test of participants’ ability to identify and differentiate the transformational leadership dimensions.

Practical Implications

The findings from this dissertation not only have implications for the research community but also for industry. For example, many organizations rely on follower ratings as part of 360° feedback evaluations, and important decisions (e.g., regarding leadership promotions) rest on these evaluations—which are treated as reliable and accurate indicators of leader behaviour. But the current findings suggest that followers’ characteristics could materially influence leadership ratings. Taken together with recent research showing that experiences with prior leaders affect ratings of current leaders (e.g. Ritter & Lord, 2007; Zhao et al., 2016), greater caution needs to be used in evaluating the meaning of results of feedback from followers. Organizations should be aware that follower ratings of leaders might be coloured by factors unrelated to the actual quality of the leader.

Another important practical implication of this work relates to leadership training. Transformational leadership can be trained (Lacerenza et al., 2017), and this training typically involves teaching participants about each of the four dimensions (Kelloway & Barling, 2000). The results from the dissertation have implications for training transformational leadership. As transformational leadership is multidimensional, leaders-in-training should be made aware of the
different behaviours involved in transformational leadership, and the different ways in which they can enact good leadership. The dissertation results also suggest that additional elements might be incorporated into leadership training. Leadership training should include instruction on the use of emotion, and teach participants that followers’ use leaders’ affective displays to interpret leadership behaviour. Additionally, training should include the message that it may not always be necessary to exhibit high levels of transformational leadership, as followers notice small displays of transformational leadership.

**Future Directions for Research**

While the studies in these chapters have built upon one another to address the question of whether transformational leadership is emotional and multidimensional, they also raise new questions. Based on the findings from the seven studies there are three major next steps of research.

First, in Study 1 I examined how the transformational leadership dimensions fit on the circumplex model of emotions. The resulting emotional characteristics of the transformational leadership dimensions were based on averages. While the affective displays of the four leadership dimensions were found to be positive and intense, I would not argue that transformational leadership behaviours are always positive and intense. Transformational leadership can also involve the expression of negative emotions or very low intensity emotions (e.g. Newcombe & Ashkanasy, 2002; Sy et al., 2018). In future research, it would be interesting to investigate exactly which discrete emotions transformational leaders use and in which contexts.

Second, the support for the multidimensionality of transformational leadership within the thesis implies that future research on transformational leadership should more often consider its
sub-dimensions, and should study them separately when theoretically appropriate. While most current research groups together the four dimensions and considers the effects of transformational leadership as a whole, it would be instructive to examine the individual effects of each of the dimensions.

Third, Study 6 showed that followers can perceive small amounts of leadership, and so the next logical question is to see whether those small amounts of leadership are enough to produce desired outcomes. Research should more often consider how much leadership is required and not treat transformational leadership, or other leadership constructs for that matter, as automatically having linear—or “dose dependent”—effects. If followers notice small levels of transformational leadership, which are sufficient to receive the same benefits of receiving high levels of transformational leadership, this would be helpful both for followers and for leaders. Finding the lower limits of how much transformational leadership is required would be very useful information for leaders, as it takes considerable effort to enact transformational leadership (Zwingmann, Wolf & Richter, 2016). Research should try to establish the level of transformational leadership where there is balance, such that followers receive the positive effects of transformational leadership but leaders do not become drained.

Finally, all of the studies focused exclusively on transformational leadership, and it would be important to broaden this research to other leadership constructs. Other positive leadership constructs such as leader-member exchange or authentic leadership could be substituted for transformational leadership in the study examining leaderships’ affective nature. The research does not need to be limited to positive leadership constructs either. In my first study I found that laissez-faire leadership and abusive supervision had very different emotional characteristics than transformational leadership, and it would be interesting to test which
emotions those leaders most often express in real work settings. Another possible difference between transformational leadership and negative leadership constructs is that negative leadership behaviours such as incivility and abusive supervision may behave very differently than transformational leadership, such that people may be more perceptive to the unique behavioural elements or to smaller magnitudes of those constructs. Studies could also test how follower emotional differences affect ratings of all of these constructs.

**Conclusion**

My dissertation examined the emotional and multidimensional nature of transformational leadership. The results of the seven studies suggest that transformational leadership is emotional, and that if follower emotional characteristics are accounted for, some support for the multidimensional nature of transformational leadership emerges. Meaningful contributions emerge for the literatures on emotions and leadership. While harsh critiques of transformational leadership exist (e.g., van Knippenberg & Sitkin, 2013; Yukl, 1999), my dissertation empirically addresses many of these concerns. Thus, taking the findings of the seven studies together, I conclude that it is too premature to abandon transformational leadership as a construct.
7.2 References


APPENDICES

Appendix A – Survey Instructions for Study 1 Samples 1 & 2

PART ONE:

Twenty-eight descriptive statements regarding different leadership behaviours are listed on the following pages. For each behaviour carefully consider the typical emotional expressions a leader would exhibit when engaging in that behaviour. Specifically, consider how positive, negative, or neutral the emotions would be and then move the slider to the corresponding value on the scale.

For example, if you see the following behaviour: "Ostracizes subordinates", and you think that as part of “ostracizing subordinates” leaders would express very negative emotions, you would move the slider towards the far left side of the scale. Another example is if you had the following behaviour: “praises good performance”, you would expect a leader to express very positive emotions, and so would move the slider towards the far right side of the scale.

As a guide, the scale points range between: -5 = very negative, 0 = neutral, and 5 = very positive.

When you are ready to begin, please click on the arrow below and you will get the first statement.

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<thead>
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<th>Neutral</th>
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PART TWO:

The same twenty-eight descriptive statements are listed on the following pages. This time for each statement carefully consider how intense the corresponding leader’s emotional expression would be, and then move the slider to the corresponding value on the scale.

Now for example, if you see the following behaviour: “Ostracizes subordinates", and you think that as part of “ostracizing subordinates” leaders would express low intensity emotions, you would move the slider towards the far left side of the scale.

As a guide, the scale points range between: -5 = very low intensity (think generally low energy emotions), 0 = medium intensity, and 5 = very high intensity (think generally high energy emotions).
Appendix B – Survey Instructions for Study 1 Sample 3

PART ONE:

Carefully consider the emotional expressions John would have exhibited during the meeting you just read about. Specifically, consider how positive, negative, or neutral the emotions would be and then move the slider to the corresponding value on the scale. On a scale ranging between -5 = highly negative, to 5 = highly positive, please rate how positive/negative John's emotional expressions would have been.

(For example, if you thought John would have expressed very negative emotions, you would move the slider towards the far left side of the scale or if you think he would have expressed very positive emotions you would move the slider towards the far right side of the scale).

Now consider how intense the emotions would be and then move the slider to the corresponding value on the scale. What I mean by intensity is how extreme the emotions would be.

On a scale ranging between -5 = very low intensity, to 5 = very high intensity, please rate the intensity of how John’s emotional expressions would be.
PART TWO:

The following questions do not relate to the story you just read, but ask about leadership in general.

You will now see a number of descriptive statements describing specific leadership behaviours. Again think about the emotional expression that would correspond with that behaviour. For each behaviour carefully consider how positive, negative, or neutral the emotions would be and then move the slider to the corresponding value on the scale.

As a guide, the scale points again range between: -5 = very negative, 0 = neutral, and 5 = very positive.

PART THREE:

Finally, you will now see the same descriptive statements one last time. Think about leaders in general again. For each statement carefully consider how intense (i.e. extreme) the corresponding leader’s emotional expression would be, and then move the slider to the corresponding value on the scale.

As a guide, the scale points range between: -5 = very low intensity, 0 = medium intensity, and 5 = very high intensity.
Appendix C – Vignettes for Study 2 & 3

**Idealized Influence condition** (189 words)

You work as a midlevel brand manager for a company within the consumer goods industry. You have many responsibilities, which include dealing with customers, liaising with other brand managers, and reporting to John, the head manager of your specific product line. John is your immediate supervisor.

Despite a very busy schedule you look forward to your weekly report meeting with John. You can present any challenge you are facing and you have learned over time that John always tries to do the right thing, rather than just taking the easy route. He acts consistently with his personal values, which are similar to your own values and your team’s values. You are currently dealing with a challenge at work, specifically a difficult client. In your last weekly report meeting you brought this up with John. He helped identify the ethical implications of the situation, and had you compare the different options based on their moral implications. It was clear John wanted you to do the right thing.

The company has just sent out its annual 360° feedback form and as part of it they have asked you to rate John.

**Inspirational Motivation condition** (192 words)

You work as a midlevel brand manager for a company within the consumer goods industry. You have many responsibilities, which include dealing with customers, liaising with other brand managers, and reporting to John, the head manager of your specific product line. John is your immediate supervisor.

Despite a very busy schedule you look forward to your weekly report meeting with John because he encourages you to exceed your high-level goals, which he has worked with you to develop. He also expresses optimism about your team’s future. You are currently dealing with a challenge at work, specifically a difficult client. In your last weekly report meeting you brought this up with John. He helped you take an optimistic approach to the situation. He showed you the opportunities that could come out of resolving the issue with the client, including how it would get you closer to achieving your team’s performance goals for that quarter. Throughout the conversation it was clear that John was positive you would find the best solution.

The company has just sent out its annual 360° feedback form and as part of it they have asked you to rate John.

**Intellectual stimulation condition** (191 words)

You work as a midlevel brand manager for a company within the consumer goods industry. You have many responsibilities, which include dealing with customers, liaising with other brand managers, and reporting to John, the head manager of your specific product line. John is your immediate supervisor.
Despite a very busy schedule you look forward to your weekly report meeting with John because he challenges you to think in new and creative ways. This allows you to perform better in your role and finish difficult assignments, helping your team’s performance. He will also ask your opinion on any work problems the group is facing in order to get differing perspectives on the issue. You are currently dealing with a challenge at work, specifically a difficult client. In your last weekly report meeting you brought this up with John. He had you look at the problem from an angle you had never considered before, and he also helped point out some of the assumptions you were making about the client.

The company has just sent out its annual 360° feedback form and as part of it they have asked you to rate John.

**Individualized Consideration Condition (190 words)**

You work as a midlevel brand manager for a company within the consumer goods industry. You have many responsibilities, which include dealing with customers, liaising with other brand managers, and reporting to John, the head manager of your specific product line. John is your immediate supervisor.

Despite a very busy schedule you look forward to your weekly report meeting with John because he spends part of the meeting catching up and asks about your life outside of work. He also takes the time to comment on the things you did well on in the past week and checks to see how you felt about your individual performance in your role. You are currently dealing with a challenge at work, specifically a difficult client. In your last weekly report meeting you brought this up with John. He checked to make sure that the situation wasn’t becoming too stressful, and reminded you about some of your personal strengths and abilities that you could use to help resolve the issue.

The company has just sent out its annual 360° feedback form and as part of it they have asked you to rate John.

**Overall transformational leadership (206 words)**

You work as a midlevel brand manager for a company within the consumer goods industry. You have many responsibilities, which include dealing with customers, liaising with other brand managers, and reporting to John, the head manager of your specific product line. John is your immediate supervisor.

Despite a very busy schedule you look forward to your weekly report meeting with John because he takes the time to comment on your personal development in your role. While reviewing the team’s progress he always expresses optimism about your team’s future. He also challenges you to think creatively if you are facing any difficult work problems. Ultimately you trust him to lead you in the right direction because you respect his personal values. You are currently dealing with a challenge at work, specifically a difficult client. In your last weekly report meeting you brought this up with John. He checked in to make sure that the situation wasn’t becoming too stressful, being attentive. Then he helped point out the ethical implications of the situation and had you question some assumptions you were making about the client.
The company has just sent out its annual 360° feedback form and as part of it they have asked you to rate John.

LF leadership (control) (187 words)

You work as a midlevel brand manager for a company within the consumer goods industry. You have many responsibilities, which include dealing with customers, liaising with other brand managers, and reporting to John, the head manager of your specific product line. John is your immediate supervisor.

Despite having a lot of work to do, you have scheduled weekly report meetings with John because it is mandated by the company. John will usually be late or occasionally not even show up. These meetings are never unpleasant but are neither productive nor helpful. You are currently dealing with a challenge at work, specifically a difficult client. In your last weekly report meeting you brought this up with John. You had initially emailed him about the client, but he never responded. In the meeting he did not spend much time addressing your issue, leaving you to make the big decisions regarding the client. This is typical of John as he rarely shows an interest in your work.

The company has just sent out its annual 360° feedback form and as part of it they have asked you to rate John.
Appendix D – Sliding Scale Items for Study 2 & 4

Please rate the extent to which each of the six leadership types was present in the passage you read.

(As a guide the scale ranges anywhere between 0 to 100. 0 means that none of the leadership style was present in the passage, 50 means the leader displayed a moderate amount of the leadership style, and 100 means the leader fully exhibited the leadership style.)

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**Ethical** - describes leaders who act as strong role models, express their values and act consistently with those values

**Stimulating** - describes leaders who encourage followers to think for themselves and help followers to solve their own problems

**Abusive** - describes leaders who intentionally engage in rude and hostile behaviours towards followers

**Inspiring** - describes leaders who set high expectations for followers, encourage followers, and are optimistic about the future

**Passive** - describes leaders who are not around when needed and do not get involved

**Relational** - describes leaders who listen, care about the individual needs of their followers and who coach their followers
Appendix E – Vignettes for Study 4 & 5

**Idealized Influence condition** (197 words)

You work as a midlevel brand manager for a company within the consumer goods industry. You have many responsibilities, which include dealing with customers, liaising with other brand managers, and reporting to John, the head manager of your specific product line. John is your immediate supervisor.

Despite a very busy schedule you look forward to your weekly report meeting with John. You can present any challenge you are facing and you have learned over time that John always tries to do the right thing, rather than just taking the easy route. He acts consistently with his personal values, which are similar to your own values and your team’s values. You are currently dealing with a challenge at work, specifically a difficult client. In your last weekly report meeting you brought this up with John. He helped identify the ethical implications of the situation, and had you compare the different options based on their moral implications. It was clear John wanted you to do the right thing. **He was trusting and humble the whole time.**

The company has just sent out its annual 360° feedback form and as part of it they have asked you to rate John.

**Inspirational Motivation condition** (200 words)

You work as a midlevel brand manager for a company within the consumer goods industry. You have many responsibilities, which include dealing with customers, liaising with other brand managers, and reporting to John, the head manager of your specific product line. John is your immediate supervisor.

Despite a very busy schedule you look forward to your weekly report meeting with John because he encourages you to exceed your high-level goals, which he has worked with you to develop. He also expresses optimism about your team’s future. You are currently dealing with a challenge at work, specifically a difficult client. In your last weekly report meeting you brought this up with John. He helped you take an optimistic approach to the situation. He showed you the opportunities that could come out of resolving the issue with the client, including how it would get you closer to achieving your team's performance goals for that quarter. Throughout the conversation it was clear that John was positive you would find the best solution. **He was energetic and enthusiastic the whole time.**

The company has just sent out its annual 360° feedback form and as part of it they have asked you to rate John.

**Intellectual stimulation condition** (199 words)

You work as a midlevel brand manager for a company within the consumer goods industry. You have many responsibilities, which include dealing with customers, liaising with other brand managers, and reporting to John, the head manager of your specific product line. John is your immediate supervisor.
Despite a very busy schedule you look forward to your weekly report meeting with John because he challenges you to think in new and creative ways. This allows you to perform better in your role and finish difficult assignments, helping your team’s performance. He will also ask your opinion on any work problems the group is facing in order to get differing perspectives on the issue. You are currently dealing with a challenge at work, specifically a difficult client. In your last weekly report meeting you brought this up with John. He had you look at the problem from an angle you had never considered before, and he also helped point out some of the assumptions you were making about the client. **He was determined and thoughtful the whole time.**

The company has just sent out its annual 360° feedback form and as part of it they have asked you to rate John.

**Individualized Consideration Condition** (198 words)

You work as a midlevel brand manager for a company within the consumer goods industry. You have many responsibilities, which include dealing with customers, liaising with other brand managers, and reporting to John, the head manager of your specific product line. John is your immediate supervisor.

Despite a very busy schedule you look forward to your weekly report meeting with John because he spends part of the meeting catching up and asks about your life outside of work. He also takes the time to comment on the things you did well on in the past week and checks to see how you felt about your individual performance in your role. You are currently dealing with a challenge at work, specifically a difficult client. In your last weekly report meeting you brought this up with John. He checked to make sure that the situation wasn’t becoming too stressful, and reminded you about some of your personal strengths and abilities that you could use to help resolve the issue. **He was kind and attentive the whole time.**

The company has just sent out its annual 360° feedback form and as part of it they have asked you to rate John.

**Overall transformational leadership** (226 words)

You work as a midlevel brand manager for a company within the consumer goods industry. You have many responsibilities, which include dealing with customers, liaising with other brand managers, and reporting to John, the head manager of your specific product line. John is your immediate supervisor.

Despite a very busy schedule you look forward to your weekly report meeting with John because he takes the time to comment on your personal development in your role. While reviewing the team’s progress he always expresses optimism about your team’s future. He also challenges you to think creatively if you are facing any difficult work problems. Ultimately you trust him to lead you in the right direction because you respect his personal values. You are currently dealing with a challenge at work, specifically a difficult client. In your last weekly report meeting you brought this up with John. He checked in to make sure that the situation wasn’t becoming too stressful, being attentive. Then he helped point out the ethical implications of the situation and had you
question some assumptions you were making about the client, where he was determined and trusting. He showed that he was confident you could find a solution and was enthusiastic.

The company has just sent out its annual 360° feedback form and as part of it they have asked you to rate John.

**LF leadership (control)** (195 words)

You work as a midlevel brand manager for a company within the consumer goods industry. You have many responsibilities, which include dealing with customers, liaising with other brand managers, and reporting to John, the head manager of your specific product line. John is your immediate supervisor.

Despite having a lot of work to do, you have scheduled weekly report meetings with John because it is mandated by the company. John will usually be late or occasionally not even show up. These meetings are never unpleasant but are neither productive nor helpful. You are currently dealing with a challenge at work, specifically a difficult client. In your last weekly report meeting you brought this up with John. You had initially emailed him about the client, but he never responded. In the meeting he did not spend much time addressing your issue, leaving you to make the big decisions regarding the client. This is typical of John as he rarely shows an interest in your work. **Throughout the meeting John was distant and disengaged.**

The company has just sent out its annual 360° feedback form and as part of it they have asked you to rate John.
Appendix F – Scripts for Study 6

Low Transformational Leadership

Hi team, it’s Bryan here. This is an introductory video to inform you about an upcoming program that you will all be taking part in. Each of the team leads has made one of these videos tailored to their own team. As you know BluEarth is a company that is constantly trying to improve itself and its employees. The organization wants to make sure that it is creating a climate of development and support and that we provide you with as many tools as we can to help you succeed at work and to meet your potential. The newest such initiative is to teach and encourage mindfulness.

As I believe in this purpose, I agreed to be one of the leaders within the company to work with our strategic human resources department in developing materials to train mindfulness. We here at BluEarth have collaborated with members of the faculty at the Smith School of Business at Queen’s University to come up with a program that will train and develop skills related to mindfulness. This begins by explaining mindfulness, what it is and how it works, its abilities to help you both inside and outside of work, and then we provide a number of actionable tools and materials to develop your own abilities around mindfulness and to help you begin including it in your day-to-day routines. With the creation of videos, such as this one, you can pull up the exercises at any time and have training always at your fingertips. Along with these videos the company will be implementing other programs within work that will help with the transition to becoming more mindful, including a new quiet space just off of the main atrium, which will become a mindfulness and meditation centre.

This is a company wide program and part of that program is being supportive of your colleagues and respectful of one another’s mindfulness practices. Throughout this process the HR department will be collecting feedback on your experiences with the training to see how you are liking it and whether you are finding it helpful. I am happy to be part of this initiative and I hope that you will be too.
Medium Transformational Leadership

Hi team, it’s Bryan here. This is an introductory video to inform you about an exciting upcoming program that you will all be taking part in. Each of the team leads has made one of these videos tailored to their own team. As you know BluEarth is a company that is constantly trying to improve itself and its employees. The organization as a whole and me as your leader want to make sure that we are creating a climate of development and support and that we provide you with as many tools as we can to help you succeed at work and to meet your maximum potential. Our newest such initiative is to teach and encourage mindfulness. Engaging in mindfulness has been a personal goal of mine over the past couple of years so I am happy that it is becoming a company wide priority. As I believe in this purpose and I believe in you, I took it upon myself to be one of the first leaders within the company to work with our strategic human resources department and begin developing materials to train mindfulness.

We here at BluEarth have been lucky to collaborate with members of the faculty at the Smith School of Business at Queen’s University to come up with a program that will train and develop skills related to mindfulness. This begins by explaining mindfulness, what it is and how it works, its abilities to help you both inside and outside of work, and then we provide a number of actionable tools and materials to develop your own abilities around mindfulness and to help you begin including it in your day-to-day routines. With the creation of videos, such as this one, you can pull up the exercises at any time and have training always at your fingertips. Along with these videos we will be implementing other programs within work that will help with this transition to become more mindful, including a new quiet space just off of the main atrium, which will become a mindfulness and meditation centre. This is a company wide program and I know that you will be supportive not only of your team members but also of all of your colleagues and will be respectful of one another’s mindfulness practices.

Throughout this process I will be requesting your feedback on your experiences with the training to see how you are liking it and whether you are finding it helpful. I am proud to be part of this initiative and I hope that you will be too.
Hi team, it’s Bryan here. I am happy to say that this is an introductory video to inform you about an exciting upcoming program that you will all be taking part in. Each of the team leads has made one of these videos tailored to their own team. As you know BluEarth is a company that is constantly trying to improve itself and its employees. The organization as a whole and me as your leader want to make sure that we are creating a climate of development and support and that we provide you with as many tools as we can to help you succeed at work and to meet your maximum potential. Our newest such initiative is to teach and encourage mindfulness. Engaging in mindfulness has been a personal goal of mine over the past couple of years so I am happy that it is now becoming a company wide priority. As I strongly believe in this purpose and I absolutely believe in you, I took it upon myself to be one of the first leaders within the company to work with our strategic human resources department to develop materials to train mindfulness.

BluEarth has been lucky to collaborate with members of the faculty at the Smith School of Business at Queen’s University to come up with a program that will train and develop skills related to mindfulness. This begins by explaining mindfulness, what it is and how it works, its abilities to help you both inside and outside of work, and then we provide a number of actionable tools and materials to develop your own abilities around mindfulness and to help you begin including it in your day-to-day routines. Along with these videos we will be implementing other programs within work that will help with this transition to become more mindful, including a new quiet space just off of the main atrium, which will become a mindfulness and meditation centre. Don't worry, I know adding mindfulness into your life is not always easy, and can require a change in perspective, so be patient with yourself throughout the training because I know you can do it. It is also important to be supportive, not only of your own team members, but of all of your colleagues, and to be respectful of one another’s mindfulness practices. I will be sure to help you along the way, and you can help by acknowledging those around you who are exhibiting mindfulness!

Throughout this process I will be requesting your feedback on your experiences with the training to see how you are liking it and whether you are finding it helpful. I will always be open to your suggestions for how the training can be improved for the future. I am proud to be part of this initiative and I hope that you will be too. Together we can enhance ourselves as well as BluEarth, ensuring a positive work experience and enabling us to provide the best to those we serve!