

# How cognitive and affective trust in the leader is related to leader behaviors and effectiveness

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## ABSTRACT

This study examines actual leader behaviors and followers' perceptions on cognitive and affective trust as predictors of leader effectiveness. Data was used from video-coded regular staff meetings, consisting of 14 leaders and 172 followers who are employed by a large Dutch public-sector organization. It was found that leaders who scored high on affective trust provide followers frequently with positive feedback during meetings, and are perceived as effective by their followers. Surprisingly, leaders who often articulated their vision were perceived as less effective by followers. Leaders who scored high on affective trust, showed less visioning behavior in comparison with leaders who scored low. In addition, leaders who scored high on affective trust, showed less intellectual stimulation behavior than the leaders who scored low on affective trust. Finally, monitoring behavior had a positive relationship with both leader effectiveness and affective trust. Overall, leader effectiveness had a stronger relationship with cognitive trust than with affective trust. These findings highlight the importance of further research into patterns of leader behaviors that may engender cognitive and affective trust among their followers. Such promising future research is likely to hold important implications for how leaders should behave and/or being trained in order to create cognitive and affective trust and therefore higher leader effectiveness.

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## Keywords

Leader effectiveness, Task-oriented behaviors, Relation-oriented behaviors, Cognitive Trust, Affective Trust, Transactional style, Transformational Leadership Style, Goal Focused Leadership style.

## 1. INTRODUCTION

Numerous studies exist which aimed to identify behaviors that increase leader effectiveness. Transformational and transactional behaviors are often used to examine leader effectiveness, because literature provided general support for the relationship between transformational leadership, transactional leadership, and leader effectiveness (Avolio, 1999; Bass, 1998). This ‘full-range-theory’ includes both transformational and transactional type of leader behaviors. One of the behavioral categories is contingent reward behavior, where ‘role and task requirements are clarified by the leader and followers obtain rewards contingent on the fulfillment of contractual obligations’ (Antonakis et al., 2003, p. 265). This is a typical behavior of a transactional leader, which main focus is on task-oriented behaviors (Colbert and Witt, 2009; Yukl et al., 2002). In contrast to task-oriented behaviors, which include clarifying, explaining or informing behavior, there are also leaders that focus on relations-oriented behaviors (Yukl, 2010). These relations-oriented behaviors can be linked to the concept of transformational leadership (Bass; 1990). Behaviors such as coaching followers, emphasizing collective missions and motivating followers by providing them challenges are key behaviors of a transformational leader. With these transformational behaviors, leaders transform the basic values and beliefs of followers and create a climate in which followers are willing to perform beyond the minimum levels specified by the leader (Podsakoff et al., 1990; Harter et al., 2002). Trust is a critical characteristic element in defining modern leadership that helps to sustain effective leadership. Without trust between followers and leaders an organization is not able to function. In the last four decades researchers from multiple disciplines have recognized the significance of trust in leaders in empirical articles and books (Dirks and Ferrin, 2002). For example, trust has been shown to have influences on the satisfaction with and perceived effectiveness of the leader (Gillespie and Mann, 2004). When followers have high levels of trust in the leader, they typically exert stronger efforts to finish their work tasks on time and are more likely to engage in behaviors that help the organization even when it is not their specified role to engage in those behaviors (Burke et al., 2007; Organ et al., 2006; Zhu et al., 2013).

In order to provide a more complete understanding of the impact of trust, it is important to distinguish between different dimensions of trust (Yang and Mossholder, 2010; Schaubroeck et al., 2011). Even with the growing evidence of the validity of distinctive trust dimensions there has been only little research conducted examining the implications of the different dimensions. Therefore, McAllister (1995) suggested that interpersonal trust could be categorized into two different dimensions: affective and cognitive. Affective trust is grounded in reciprocated interpersonal care and concern, and cognition-based trust is grounded in individual beliefs about reliability and dependability of the leader.

In this study we will examine which specific, single type of leader behaviors are related to trust in the leader, as perceived by the followers, and how the identified two forms of trust can explain leader effectiveness. In order to do this, we will analyze relations-oriented and task-oriented behaviors, taking into account the role of affective and cognitive trust. We aim to contribute to the leadership theory by examining if specific relations-oriented behaviors of a transformational leader are positively related to affective trust of the leader, as perceived by the follower.

cognitive trust of the leader, as perceived by the follower. So the overall specific research question we started out with is: which leader behavior leads to high affective and cognitive trust in the eyes of the follower? To distinguish this study from other studies, we use video-based field observations as data that are inter-reliably coded and connected to the focal concepts. Earlier leader effectiveness and behavioral leadership studies have employed a survey-only measurement approach (Erkutlu, 2006; Picollo et al., 2012).

## 2. THEORY AND HYPOTHESES

### 2.1 Trust

Trust plays a crucial role in explaining leadership effectiveness (Yang and Mossholder, 2010). The degree to which followers are willing to follow the actions of the leader depends on how they are treated by the leader. Many definitions of trust exist. Rousseau et al. (1998) defined trust as: “a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another” (p. 395). Another commonly used definition proposed by McAllister (1995) is: “an individual’s belief in, and willingness to act on the basis of the words, actions and decisions of another” (p. 25). Most studies conceptualized trust as a one-dimensional measure (Jung and Avolio, 2000; Pillai et al., 1999), and did not distinguish between cognitive and affective trust. However, it is important to include both components of trust because they are different in nature (McAllister, 1995), and could therefore have different effects on the process in which followers perceive trust in the leader. Therefore we use in our research McAllister’s (1995) two-dimensional model of trust, which includes cognitive-based and affective-based trust. This model has been analyzed in meta-analytical work of Dirks and Ferrin (2002) and is validated in other studies of leadership; including those that link leadership style to enhanced follower job performance (Yang and Mossholder, 2010; Schaubroeck et al., 2011; Zhu et al., 2013). Understanding the different dimensions of trust may, from a practical perspective, help leaders better leverage the effects of trust (Kramer and Cook, 2004). For example, if a leader wishes to encourage goal-accomplishment, which type of trust should he focus on?

#### 2.1.1 Cognitive Trust

Followers’ confidence in the leader’s capabilities is seen as the primary element of cognition-based trust. Cognitive trust depends on the follower’s personal appraisal of the leader i.e. whether or not the leader has shown competence, reliability and integrity in the past (Zhu et al., 2013). Followers adjust their behavior based on the leader’s track record; they assess the leader’s capacity to guide their performance and his willingness to defend their interests (Colquitt et al., 2012; Dirks and Ferrin, 2002; McAllister, 1995). This shapes followers’ attitudes; it makes them feel confident in their leader’s ability and adequacy to lead their task performance (Mayer et al., 1995). This, in turn, should encourage followers to engage in behavior that benefits the organization.

#### 2.1.2 Affective Trust

In addition, this conception of McAllister (1995) highlights the emotional bond between the leader and followers. The leader makes an emotional investment in trust relationships

that are grounded upon expressions of genuine care and concern for the welfare of the other party (McAllister, 1995, p. 26). In terms of behavior, we can see this in verbal and non-verbal instances as providing help and assistance, which is personally chosen behavior that isn't role-prescribed nor directly rewarded, which may cause the referent to demonstrate a feeling of benevolence. This relationship-based form of trust is, among others, important for how leaders behavior may translate into extra-work behavior of his followers (Yang and Mossholder, 2010). Ultimately, the emotional ties linking leader and his follower can provide the basis for trust.

### **2.1.3 Relation Between Cognitive & Affective Trust in the Leader**

If a leader wants to develop a strong working relationship with his followers, some cognition-based trust may be essential for affect-based trust to develop. McAllister (1995) argued that when a baseline level of cognition-based trust is met, followers are more willingly to form emotional attachments with a leader that affect-based trust represents. McAllister suggested therefore that cognition-based trust positively influences affect-based trust.

## **2.2 Leader Effectiveness - Transformational & Transactional Leadership**

The search for and identification of those behaviors that increase a leader's effectiveness has been a major concern of practicing managers and leadership researchers alike for the past several decades (Bass, 1990; House, 1988; Jaussi and Dionne, 2009; Yukl, 1989). Bass and Avolio (1997) found that a transformational leader exhibit charismatic behaviors, wakes inspirational motivation by his followers, provide intellectual stimulation and treat followers with individualized consideration. In 1978, James MacGregor Burns' published his book 'Leadership', in which he introduced the concept of transformational leadership. Inspired by this and by the theory of charismatic leadership Bass added the style of transformational leadership and the means to measure it. The definition of transformational leadership that Bass and Riggo use is (2006, page 3): "Transformational leaders are those who stimulate and inspire followers to both achieve extraordinary outcomes and, in the process, develop their own leadership capacity." After the introduction of transformational leadership style by Burns (1978), transformational leadership received a lot of attention in empirical studies in many different contexts. In these studies it has been found that the transformational leadership style is consistently related with leadership effectiveness (Bass 1985; Lowe et al., 1996). Yukl (2010) also acknowledged that it is important to show interests in the followers' well being and encourage them to participate and develop in order to be an effective leader. Effective transformational leaders motivate followers to go beyond the minimum requirements as stated in job descriptions, resulting in higher levels of follower's performance (Podsakoff et al., 1996; Breevaart et al., 2014). One critical mechanism in this process is the development of followers' trust in the leader (Jung and Avolio, 2000; Kark et al., 2003; Podsakoff et al., 1990).

In 1978 Burns stated that the transformational leadership style was posited as the opposite of the

transactional style. Bass (1999) didn't agree with Burns, he noted that transformational and transactional leadership are separate concepts, not opposites, and argued that 'the best leaders are both transformational and transactional' (p. 21). In this view, the transformational leadership style is expected to be ineffective without a transactional relationship between leader and follower (Bass et al., 1987). This means that transformational leadership augments the transactional style; it adds unique variance for predicting organizational outcomes, beyond what can be accounted for by transactional style (Bass, 1985; Wang et al., 2011). The ability of transformational leaders to receive performance beyond what can be accounted for by transactional style, but not vice versa, has been labeled as the "augmentation hypothesis" (Hater and Bass, 1988; Waldman et al., 1990).

The transactional leadership style is focused on the exchange relationship with his followers; 'the leader motivates followers by recognizing their needs and providing rewards to fulfill those needs in exchange for follower's performance and support' (Rainey, 2009, p.327). In these exchanges, transactional leaders clarify the roles followers must play and the task requirements followers must complete in order to reach their personal goals while fulfilling the mission of the organization (Lewis and Kuhner, 1987). Effective transactional leadership is contingent on the leaders' abilities to meet and respond to the reactions and changing expectations of their followers (Kellerman, 1984). In contrast with transformational leadership, there hasn't been much research on the link between transactional leadership and leader effectiveness (Hinkin and Schierheim, 2008).

Bass (1985) developed an instrument, 'the Multifactor Leadership Questionnaire (MLQ)', to measure both transformational and transactional leader behavior. The MLQ includes the complementary dimensions of transformational and transactional leadership with sub-scales to further differentiate leader behavior.

Transformational leadership has four dimensions, the first dimension is *idealized influence* behaviors, which ensures that the transformational leader is respected, admired and trusted by his followers. Followers identify with the leader, which talks about his values and beliefs and emphasize the collective mission and purpose (Aydogdu and Asikgil, 2011). The second dimension is *inspirational motivation*, which refers to a leader that motivates his followers by providing them meaning and challenge. The leader challenge followers with high standards and communicates optimism about future goal achievement. The third dimension of transformational leadership is *intellectual stimulation*; leaders stimulate new ideas and solutions by the followers. Followers are encouraged to think about new ways for old problem so that they are able to see and solve unexpected problems by the leader (Bass and Avolio, 2004). Transformational leaders also act as a mentor or coach, in order to accomplish follower's need for growth and achievement. This fourth dimension of transformational leadership is named '*individualized consideration*'. This dimension is consistent with the supporting dimension of Yukl et al. (2002), which is part of the relations-oriented behavior category.

Besides supporting, relations-oriented behaviors include developing, recognizing, and empowering (Yukl et al., 2002). Yukl describes, in his taxonomy of leader behaviors (2002), that the main objectives for relations-oriented behaviors are strong commitments among followers

and high levels of trust and cooperation; this is also a main objective of the transformational leader. When followers feel trusted and respected by the leader they are motivated to do more than they are expected to do (Yukl, 1989, p.272; Burke et al., 2007; Organ et al., 2006; Zhu et al., 2013). That is why transformational behaviors are believed to augment the impact of transactional leader behaviors on followers' performance.

Different than transformational leadership, transactional leadership has three dimensions: contingent reward, management-by-exception, and laissez faire management. The first dimension of transactional leadership is *contingent reward or contingent reinforcement*, which involves an exchange process in which specific rewards are exchanged for follower effort. The leader clarifies expectations, and establishes a pattern of rewards for meeting those expectations for successful follower performance. The second dimension, management-by-exception, can be spitted in a passive and active form. Management-by-exception in the passive form, focuses on addressing problems only after they have become serious. The leader doesn't give direction if the old ways are satisfying and followers still achieve the performance goals (Hater and Bass 1988). In the active form the focus is on detecting and correcting problems. Thus management-by-exception is the degree to which the leader takes corrective action based on results of leader-follower transactions (Judge and Piccolo, 2004). This dimension has been shown to be either not or negatively related to leader effectiveness (Lowe et al. 1996). The third dimension of transactional leadership is laissez-faire leadership, which is the absence of leadership, non-leadership, indicating leaders who are missing when needed, avoid making decisions and action. Avolio, 1999 stated that laissez-faire leadership is poor, ineffective leadership and highly dissatisfying for followers.

In Bass and Avolio's (1994) full range of leadership model, contingent reward leadership was the only leadership behavior that was seen as effective. Contingent-reward behavior can be viewed as the basis of effective leadership, and transformational leadership as adding to that base for greater leader effectiveness (Waldman et al., 1990). Behaviors involved in the transactional style are all task-oriented; they are usually characterized as instrumental in followers' goal attainment (Bass, 1997). Yukl et al. (2002) stated that the primary objectives of task-oriented behavior include high efficiency in the use of resources and personnel, and high reliability of operations, products and services. In order to achieve these objectives leaders exercise behaviors such as: short term planning, clarifying responsibilities and performance objectives and monitoring operations and performance (Yukl, 2008). Short-term planning is about deciding what to do, how to do it, who will do it and when it will be done. Planning is most observable when the leader implements the plan; this involves a process of clarifying responsibilities and objectives (Yukl et al., 2002). Clarifying responsibilities involves the communication of role expectations, policies and plans to make sure that followers know what to do and how to do it. Clarifying responsibilities encourage a search for efficient work manners and facilitate evaluation of performance. In order to encourage effectiveness of the work behaviors of the followers, the degree of information exchange between leader and follower needs to be high. Another task-oriented behavior is monitoring operations and performance;

monitoring involves gathering information about operations of a leaders organizational unit by for example observing work operations, inspecting the quality of samples of the work and holding review meetings with followers. Monitoring also facilitates the effective use of the other behaviors such as planning. These task-oriented behaviors of a leader can increase the performance of followers, this was found in extensive research using observations, experiments, survey questionnaires and critical incidents (Bass, 1990 and Yukl, 2006). Therefore, in this study we examine the effect of directing, task monitoring, informing and structuring as task-oriented behaviors of the transactional style, in relation with the perceived cognitive trust of the follower.

## 2.3 Transformational Leadership and Relation-oriented Behaviors

An important concept for the relationship between transformational leaders and their followers is trust; they have been closely linked in several studies (e.g., Dirks and Ferrin, 2002; Dirks and Skarlicki, 2004). Dirks and Skarlicki (2004) found that a leader with an effective transformational style was conducive to obtain followers' trust. This is also logical because it is unlikely that leaders who are not trusted by their followers can achieve their commitment to a vision. As stated earlier, follower affective trust grows over time as a leader and a follower engage in social exchange and show reciprocated, genuine care and concern, developing a relational bond. The four components of transformational leadership (Bass and Avolio, 1997) should contribute to strengthen cognitive, and especially affective trust.

The first factor is 'idealized influence', which indicates to what extent followers trust, respect and see the leader as their role model. Transformational leaders can show with their idealized influence genuine care and concern, which strengths followers affective trust. Another factor is 'inspirational motivation', which indicates the way in which leaders are capable of expressing their vision. Thus with inspirational motivation leaders can express their followers what they expect from them, and how they should act to fulfill those expectations. If the follower feels that the leaders made a justified decision, it is likely that the follower would enter the process of social exchange and thereby builds up affective trust with the leader (Pillai et al., 1999). Besides that, Gillespie and Leon Mann (2004) concluded in their study that: 'consulting followers when making decisions, and communicating and modeling a collective vision, can be viewed as the key to a set of team leadership practices which elicit the trust and confidence of team members'. Idealized influence and inspirational motivation are important in inspiring followers to be engaged in their work by developing, identifying, and articulating a particular vision (Leithwood et al., 1996).

### ***H1: A leader who shows more visioning behavior scores higher on followers' affective trust in the leader***

Secondly, intellectual stimulation of the leader should enhance affective trust. Transformational leaders help their followers to challenge their assumptions and to think about old problems in new ways. In this process the leader also enters the process of social exchange by asking followers for their input in the decision-making processes (Wasti, 2011).

***H2: A leader who shows more intellectual stimulation behavior scores higher on followers' affective trust in the leader***

And the fourth component, individual consideration is possibly the most noticeable way for the leader to create a relational bond with his/her followers. These are behaviors signifying socio-emotional support to followers and this includes acknowledgement of individual differences and concerns. Individually caring leaders help followers with their individual problems, delegate opportunities to them and care for their welfare. Followers are urged to reciprocate these efforts via social exchange, enhancing affective trust.

***H3: A leader who shows more individual consideration behavior scores higher on followers' affective trust in the leader***

One of the psychological rewards that transformational leadership brings is positive feedback (Charon, 2003). Transformational leaders can offer positive feedback to improve followers' performance and to reduce relationship conflict (Randall and Kristin, 2003). Followers may regard positive feedback as a leader's praise or recognition directed toward followers performing at or above expectations. Giving positive feedback to followers may make them feel more empowered, which in turn may enhance their relational bond with, and affective trust in the leader.

***H4: A leader who gives more positive feedback scores higher on followers' affective trust in the leader***

## **2.4 Transactional Style and Task-oriented Behaviors**

Transactional behaviors, as described earlier, are based on an exchange process in which the leader provides rewards in return for the follower's effort (Burns, 1978). In order to examine the effectiveness of transactional leader behaviors, we observe the task-oriented behaviors of the leader e.g. giving direction, task monitoring, informing and structuring. In the relationship between the transactional leader and his followers, it has been found by some researchers that transactional leadership behavior and trust in leader have a positive relationship (MacKenzie et al., 2001; Dirks and Ferrin, 2002; Gillespie and Mann, 2004). This kind of trust in a transactional leader is expected to be cognitive-based trust and not affective-based trust. Since the transactional leader does not develop commitment toward followers' personal development nor a strong emotional attachment with his followers (Mackenzie et al., 1991). Cognitive-based trust is based on performance-relevant cognitions, like reliability, responsibility, dependability and competence.

When the transactional leader engages in short-term planning, he directs his followers to a desired goal. The leader divides the tasks among followers without enforcing them. Directing is a sub-behavior of steering and also involves clarifying follower responsibilities. This behavior should enhance cognitive trust in the leader, as his followers will see it as an indicator of leader ability.

***H5: A leader who sets clear direction scores higher on followers' cognitive trust in the leader***

Monitoring can be defined as behaviors conducted by the leader to gain information about his followers (Ferrin et al., 2007). Receiving such information provides the leader with more scope for formal control, whereby he can determine

whether there are deviations from the agreements that he made in advance with his followers (Bijlsma-Frankema and Costa, 2005). If the leader engages much in monitoring the performance of his followers (involving e.g. checking task progress of his followers and holding review meetings with

them) it could reduce the amount of deviation from the norm (Welbourne and Ferrante, 2008). Followers may enhance their confidence in the leader when they perceive his monitoring as 'careful attention' to their work, which might result in perceptions of justice and development of relevant feedback for them (Niehoff and Moorman, 1993; Zhou, 1998). This way, monitoring behavior could enhance cognitive trust in the leaders, as his followers will see it as an indicator of the leader's capability to guide their performance adequately.

***H6: A leader who shows more task monitoring behavior scores higher on followers' cognitive trust in the leader***

Informing refers to the leader's dissemination of factual information about the company, followers' tasks and other important information. Leaders provide information to followers so that they can perform their tasks properly. Followers should perceive leaders, who inform them about well-grounded expectations and goals, as competent. When followers see their leaders as an expert, they can rely on him/her and this should enhance cognitive trust in the leader.

***H7: A leader who shows more informing behavior scores higher on followers' cognitive trust in the leader***

Structuring is the degree to which a leader defines and organizes his role and the roles of followers, is oriented toward goal attainment, and establishes well-defined patterns and channels of communication (Fleishman, 1973). A leader, who adheres to the agenda with behaviors such as: changing the topics, structuring the meeting and shifting towards the next agenda point, could be perceived as being effective during meetings (Doyle and Straus, 1976). This could enhance follower's cognitive trust in their leader, as his followers will perceive it as a good competence of the leader.

***H8: A leader who shows more structuring behavior scores higher on followers' cognitive trust in the leader***

The only part of transactional leadership that was seen as affective is the part in which the leader set goals in exchange for rewards. Goal setting is considered as a key role of a leader in the creation of a clear understanding of the organization's goals and the follower's role in achieving these goals (Messick, 2005). That is why we also will examine the role of goal-focused leadership in relation with cognitive trust.

## **2.5 Goal-focused Leadership**

Since the book of Locke and Latham's (1990), which treats goal setting as an integral and defining characteristic of effective leadership, the concept of goal-focused leadership emerged. Goal focused leadership includes task-oriented behavior that emphasize goal achievements by setting clear goals, providing structures to the task, clarifying the means by which the goals can be achieved and following up to ensure goal achievement (Colbert and Witt, 2009). Colbert and Witt defined goal-focused leadership as: 'leadership that uses policies and practices to communicate organizational goals and align employees' efforts with these goals' (p.790).

One of the crucial elements for acceptance of the goals by followers is the degree of trust that the followers have in their leader (Bennis and Nanus, 1985). As described above, cognitive trust is the result of an evaluation of performance reliability and competence. When followers feel that their leader is experienced and effective enough to perform his leadership role and that he will act with integrity, they will trust their leader more at the cognitive level. The behaviors of a goal-focused leader emphasize typically the importance of goal achievement and provide information relevant to achieving organizationally important goals. Stressing those task-related work aspects should contribute to a higher level of cognitive based trust in the leader. After all, leaders show off their capabilities when they set clear goals and when they actually achieve them. In addition, achieving organizational goals under guidance of the leader should enhance his/her track record; it strengthens followers' perception about the leader's capacity to guide their performance. Thus cognitive trust is based on the performance-relevant cognition of the follower and is higher for leaders that exhibit high levels of goal-focused leadership leading to the following hypothesis:

*H9: Goal focused leadership is positively related to cognitive trust in the leader*

### 3. METHODS

#### 3.1 Design of Study

In this cross-sectional study design two different data sources are used: a survey that measured followers' perception of the leader, and a reliably video-coded followers' and leader behavior during staff meetings. By systematic video coding, various behaviors of the leaders and followers have been observed. Furthermore, a survey measured the perception of followers about leader effectiveness. By using this variety of methods and sources, common source bias is reduced in this study (Podsakoff et al., 2003).

#### 3.2 Sampling

The leader sample consisted of 14 leaders employed in a large Dutch public sector organization. Those leaders were either from M1 level of management or M2 level of management within this public organization. The sample was comprised of 9 male (64.3%) and 5 female (35.7%) leaders and the leaders were on average 52.5 years old, ranging from 46 to 61 (SD=4.6). The average job tenure of the leader sample is 27.2 years, ranging from 3 to 43 (SD=13.92). Next to the leader sample, the sample of the followers consisted of 172 employees employed in the same large Dutch public sector organization as the leaders. The sample was comprised of 112 male (65.1%) and 50 (29.1%) female followers and from 10(5.8%) the sex is unknown. These followers were on average 49.4 years old, ranging from 22 to 64 (SD=10.31). The followers have an average job tenure of 24.7 years (SD=13.43), ranging from 6 months to 44 years.

The leaders and followers were asked, directly after the video recorded staff meeting, to fill out a survey in which they were asked about the leaders effectiveness, their cognitive and affective trust in the leader and their leader's degree of transactional, transformational and goal-focused leadership.

In total, 14 leaders and 172 followers filled in the survey, which results in a response rate of 100 % for the

leaders and 100% for the followers.

### 3.3 Measures

**Leader Effectiveness.** Leadership effectiveness was measured with the 4 overall-effectiveness items from the Multi Leadership Questionnaire. This measure of overall leader effectiveness, as perceived by the followers, consisted of sample items like: 'My supervisor is effective in meeting my job-related needs' and 'My supervisor is effective in meeting organizational requirements.' The response categories ranged from 1(never) to 7(always). The Cronbach's alpha for this construct was .917.

**Transformational Leadership Style.** The degree to which a leader is perceived as having a transformational style was assessed through followers' survey scores. This style was measured with the MLQ items, Form 5X (Bass and Avolio, 1995). The MLQ items demonstrate good construct validity (Lowe et al. 1996) and scholars (e.g., Avolio et al., 1999) have shown that the MLQ-Form 5X is a sound instrument for measuring the transformational style. Bass and Avolio (1995), consider transformational leadership as a higher-order construct, consisting of the following MLQ component scales: inspirational motivation (4 items e.g. 'Talks optimistically about the future'  $\alpha = .344$ ); idealized influence-attributes (4 items, e.g., 'Instills pride in others for being associated with him or her'  $\alpha = .866$ ); Intellectual stimulation (4 items, e.g., 'reexamines critical assumptions to question whether they are appropriate'  $\alpha = .876$ ); and individualized consideration (4 items, e.g., 'Considers each individual as having different needs abilities and aspirations from others'  $\alpha = .905$ ). The response categories ranged from 1 (never) to 7 (always). Because transformational leadership is a higher order construct comprising conceptually distinct yet typically inter-correlated scales (Bass, 1985), the four subscales were aggregated to represent the construct of transformational leadership. This is consistent with previous empirical work (Avolio et al., 2004; Liu et al., 2010). The overall Cronbach's Alpha was .816.

**Trust in the Leader.** Affective trust and cognitive trust were adapted from the scale developed by McAllister (1995). Five items were used to measure affective trust. Sample items of affective trust included 'We would both feel a sense of loss if one of us was transferred and we could no longer work together,' and 'We can both freely share our ideas, feelings, and hopes.' Six items measured cognitive trust. Sample items of cognitive trust were: 'This person approaches his/her job with professionalism and dedication', 'I can rely on this person not to make my job more difficult by careless work,' and 'Given this person's track record, I see no reason to doubt his/her competence and preparation for the job.' Followers were asked to rate their trust in their immediate leaders. The Cronbach's alphas for affective trust and cognitive trust were .918 and .938. Based on the range of 14 aggregated-mean leader scores, a distinction was made between the three leaders with the highest score on affective trust and the three with the lowest scores. The same was done for cognitive trust.

**Goal-Focused Leadership Style.** Followers rated their supervisors on five items goal-focused leadership scale of Colbert and Witt (2009). This scale assesses the degree to which the leader sets goals and defines roles, responsibilities, and priorities. Sample items included: 'To what extent does the supervisor provide directions and

define priorities' and 'To what extent does the supervisor clarify specific roles and responsibilities?' (Colbert and Witt, 2009). Followers rated their leader using a 7-point response scale (1 = strongly disagree, 7 = strongly agree). The Cronbach's alpha for this construct was .913.

**Observed Behaviors.** Many leadership authors have advocated the use of direct measurement of actual field behavior (Hunter et al., 2007; Yukl et al., 2002). In order to observe the task-oriented and relation-oriented behaviors of the leaders, 14 leaders were all video recorded during a regular staff meeting. The three cameras were placed before the meeting started. To be sure there were no reactivity assumptions, we asked the followers about the representativeness of the leader's behavior during the video-filmed staff meeting. The response categories ranged from 1 (not representative) to 7 (highly representative). The average score in this study was 5.57 (SD= 1.34), indicating that the leader's behavior was representative.

In order to be able to systematically code the leaders behaviors, we made use of a detailed, pre-set behavioral observation schema, designed and developed in previous studies (e.g. Gupta et al., 2009; Hoozeboom et al. 2009; Van der Weide, 2007). Two independent observers minutely coded these behaviors in the Leadership Lab at the University of Twente, using a specialized software program 'The Observer XT' (Noldus et al., 2000). The codebook included detailed indications for coding 15 mutually exclusive leader behaviors. These behaviors can be grouped into 3 meta-categories (see also Gupta et al., 2003): self-defending, steering and supporting. Behaviors in the categories steering and supporting consist of the task-oriented and relation-oriented behaviors, which we used in the hypothesis.

The behaviors were coded on the basis of how often a specific behavior occurred, the frequencies and the duration of the behavior. The relation-oriented behaviors are in the behavioral repertoire represented by: visioning, intellectual stimulation, individualized consideration and positive feedback. And the task-oriented behaviors by: directing, task monitoring, informing, and structuring the conversation. For an overview of the behaviors that are coded, with some illustrative examples, see Appendix A.

### 3.4 Video Observation Method

During randomly selected staff meetings in the ordinary course of business the 14 leaders and followers were videotaped. A total of 1800 minutes have been recorded while each meeting took 138,47 minutes on average. Through the behavioral software program "The Observer XT" which has been developed for the analysis, management and presentation of observational data (Noldus et al., 2000), the videos were precisely coded and analyzed.

The observers were six third year students of International Business Administration and three master students of the University of Twente who all received training about "The Observer XT". Additionally, they learnt how to apply the 15-pages behavioral coding scheme within the software (Van der Weide, 2007). These trainings and clear instructions helped to enhance the accuracy of the coding of different behaviors.

On the basis of the behavioral coding scheme, the pre-defined sets of behaviors were coded very precisely for each leader and each follower to ensure valid and reliable results. In order to avoid subjectivity bias, two observers

coded each video independently and subsequently the results were compared through the so-called confusion error matrix by "The Observer XT" to determine inter-reliability. This inter-reliability was defined as the percentage of agreement of a specific code within a time range of two seconds and if significant differences or disagreements occurred, the observers re-viewed, discussed and re-coded the affected fragment. In this study, the obtained average inter-reliability rate was 95%.

Each team meeting was recorded by three video cameras installed beforehand in the meeting rooms so that actual leader and follower behaviors could be ensured. According to Erickson (1992) and Kent and Foster (1997), shortly after entering the meeting room, the presence of the camera is forgotten and leaders and followers behave naturally whereas observers who attend meetings often cause more obtrusive and abnormal behaviors of leaders and followers. This is why video cameras are used instead of outside people sitting in the same room who observe the meeting and take notes. Hence, observer bias is prevented and the meeting takes place without any interferences.

### 3.5 Behavioral Coding Scheme

A behavioral coding scheme has been developed in order to capture specific leadership behaviors during the daily work practices (Gupta et al., 2009; Nijhuis et al., 2009; Van der Weide, 2007). In the appendix, a table is added which contains different leadership behaviors, which are coded in this current study. After each behavior, there has been given a short description about the behavior and a couple of examples to understand the different behaviors more in detail. A solid base for this video coding scheme has been developed by Bales (1950) and Borgatta (1964). Bales (1950) and Borgatta (1964) observed in early studies the interaction processes between the leaders and their followers. The observation of the interaction processes is done without any use of tape-recording device. In their exploratory work they made distinction between three broadly defined behaviors; neutral task oriented behavior, positive-social emotional behavior and the remaining socio-emotional behavior. Bales' (1950) and Borgatta's (1964) work provided a practical scheme for coding of a range of leadership behaviors (Yukl et al., 2002). Feyerherm (1994) extended the work of Bales and Borgatta; he used an experimental approach towards measuring the leadership behaviors and added some task-oriented and social-oriented behaviors to the work of Bales and Borgatta. The three coding schemes, (Bales, 1950; Borgatta, 1964; Feyerherm, 1994), have two important commonalities. First, all of the three schemes assess the directly observable behavior. Second, the three studies use behavioral schemes to code leader behavior in a group context (e.g., Avolio, Howell and Sosik, 1999; Bass and Avolio, 1995; Pearce et al., 2003; Yukl et al., 2002). We have also used the behavioral taxonomy of Yukl et al. (2002) in the development of the behavioral coding scheme. It is more accurately to describe the behaviors of the leaders more in detail, the observable behaviors, than in one or two meta-constructs such as transactional or transformational leadership. Examples of behavior coded as directing behavior are; "I want you to have the work done next week", "You handle this one", and "Do you want to figure this out for me?"

## 4. RESULTS

Table 1 shows an overview of the frequency and duration of each video-filmed and – coded behavior of all 14 leaders during the regular staff meetings. In total, 4701 behaviors were coded in a total of 1800 minutes of meeting time. The descriptive results show that the leaders displayed ‘informing-behavior’ most frequently (27,03% of the time); this is as well the behavior with the longest duration (i.e., 41,89% of the time). Another behavior, which was frequently observed, and with the second highest duration, is ‘visioning’ (which was shown 18,47 percent of the time in frequency and 22,72 percent of the time in duration). In comparison with these percentages, the leaders in the observed videos did not engage often in individualized consideration, which was shown the least frequently (1,86% of the time) and for the shortest duration (3,96% of the time). The task-oriented behaviors, e.g. directing, task monitoring, informing and structuring, accounted for more than half of the total frequency and duration of the behaviors. The transformational leadership behaviors (i.e., visioning, intellectual stimulation, individualized consideration and giving positive feedback) were displayed in more than a quarter of the total frequency and duration data. The behavioral category ‘self-defending’ (e.g., showing disinterest, defending own position and providing negative feedback) among the leaders occurred less frequently

After displaying the behaviors of all leaders in the meeting, we focused on the 3 leaders who scored, according to the followers, the highest and lowest on cognitive and affective trust. We used the Mann-Whitney U-test to examine the significant (1-tailed) difference between the comparison groups, see table 2 and 3.

The Mann-Whitney U test, which is also known as the Wilcoxon rank sum test, can be used to answer questions concerning the difference between groups. This test requires two independently sampled groups, which are randomly drawn from the target group, and the measurement scale should be of ordinal or continuous type (Nachar, 2008). The

**TABLE 1 Frequency and duration of the leader behaviors in % (n=14)**

Displayed behaviors	Duration	Frequency
Showing disinterest	0,02%	0,16%
Defending own position	3,79%	3,54%
Providing negative feedback	1,40%	1,37%
Disagreeing	0,48%	2,01%
Agreeing	1,91%	6,88%
Directing	3,86%	8,15%
Task monitoring	3,72%	9,49%
Structuring the conversation	9,91%	7,35%
Informing	41,89%	27,03%
Visioning	22,72%	18,47%
Intellectual stimulation	3,61%	4,64%
Individualized consideration	1,86%	3,96%
Humor	1,48%	3,20%
Providing positive feedback	1,36%	1,75%
Personal informing	1,61%	1,06%
Personal attention	0,38%	0,94%
Total	100,00%	100,00%

Mann-Whitney U test does not assume that the difference between samples is normally distributed. We used this nonparametric test, because the data did not meet the parametric assumptions of the t-test (e.g. normal distribution of the dependent variable).

**TABLE 2 Mann-Whitney Test and Direction in Terms of the Behaviors of the Leaders Scoring the Highest and Lowest on Cognitive Trust**

Variables	Duration	Frequency	Difference in % (Dur.)	Difference in % (Freq.)
1. Directing	0,3145	0,3145	-0,76%	-14,28%
2. Task monitoring	0,2	0,057	1,73%	6,31%
3. Structuring the conversation	0,5	0,5	-0,20%	0,92%
4. Informing	0,4285	0,2	-3,18%	-5,37%

\* = 1 tailed  $p < .05$

\*\* = 1 tailed  $p < .01$

**TABLE 3 Mann-Whitney Test and Direction in % of the Behaviors from the three Leaders who scored the Highest and Lowest on Affective Trust**

Variables	Duration	Frequency	Difference in % (Dur.)	Difference in % (Freq.)
1. Visioning	.057	.1145	-22,23%	-13,43%
2. Intellectual stimulation	.0285*	.0285*	-2,66%	-3,83%
3. Individual consideration	0,4285	.4285	-0,22%	0,17%
4. Positive feedback	0,0285*	.0285*	3,04%	2,85%



**Table 4 Correlation of Leader Effectiveness and the Independent Variables of the Study (Frequencies)**

Varibales	1	2	3
<b>1. Leader effectiveness</b>			
<b>2. Cognitive Trust</b>	<b>.683**</b>		
<b>3. Affective Trust</b>	<b>.771**</b>		
<b>4. Goal-focused Leadership</b>		<b>.572*</b>	
<b>5. Transformational Leadership</b>			<b>.802**</b>
6. Showing Disinterest	0,495*	.278	.447
7. Defending Own position	0,473*	.443	.552*
8. Providing Negative Feedback	0,299	-.253	.042
9. Disagreeing	-0,593	-.42	-.565*
10. Agreeing	0,062	.266	.042
<b>11. Directing</b>	<b>-.165</b>	<b>.17</b>	<b>-.147</b>
<b>12. Task Monitoring</b>	<b>.51*</b>	<b>.436</b>	<b>.466*</b>
<b>13. Structuring the Conversation</b>	<b>.079</b>	<b>-.011</b>	<b>.244</b>
<b>14. Informing</b>	<b>-.185</b>	<b>.011</b>	<b>-.051</b>
<b>15. Visioning</b>	<b>-.466*</b>	<b>-0,273</b>	<b>-.233</b>
<b>16. Intellectual Stimulation</b>	<b>-.141</b>	<b>.24</b>	<b>-.319</b>
<b>17. Individual Consideration</b>	<b>.141</b>	<b>.059</b>	<b>-.16</b>
18. Humor	.37	.336	<b>.284</b>
<b>19. Positive Feedback</b>	<b>.559*</b>	<b>.333</b>	<b>.572*</b>
20. Personal Informing	.568*	.322	.434

\* = 1 tailed p < .05

\*\*= 1 tailed p < .01

It is noticeable that leaders who scored high on cognitive trust, compared to leaders who scored low on cognitive trust, did not show any significant difference in the hypothesized task-oriented behaviors (i.e., directing, task monitoring, structuring and informing). The number of times task monitoring behavior occurred by the leaders was marginally significant ( $p=.057$ ) with a difference of 6,31% in frequency between the leaders who scored high and low on cognitive trust, see table 2.

For leaders who scored high on affective trust, we found significant difference in two behaviors: intellectual stimulation ( $p < 0.05$ ) and providing positive feedback ( $p < 0.05$ ), see table 3. Leaders, who scored higher on affective trust, gave 3,04% of the total duration more positive feedback, as opposed to their lower scoring counter-parts.

A surprising finding is that leaders who scored low on affective trust, stimulated followers more intellectually (2,66%) in comparison with the leaders who scored the highest on affective trust, indicating a negative direction.

Visioning and individualized consideration behaviors of the leader did not show any significant differences.

Hereafter, a correlational analysis with Spearman's rho is executed in order to test which variables show a significant (1-tailed) correlation with the dependent variables leadership effectiveness, cognitive trust and affective trust. The observed behaviors in this study are not

**Table 5 Correlation of Leader Effectiveness and the Independent Variables of the Study (Duration)**

Varibales	1	2	3
<b>1. Leader Effectiveness</b>			
<b>2. Cognitive Trust</b>	<b>.683**</b>		
<b>3. Affective Trust</b>	<b>.771**</b>		
<b>4. Goal-focused Leadership</b>		<b>.572*</b>	
<b>5. Transformational Leadership</b>			<b>.802**</b>
6. Showing Disinterest	0,516	.329	.462
7. Defending Own Position	0,471	.532*	.612**
8. Providing Negative Feedback	0,48	.15	.264
9. Disagreeing	-0,57	.319	-.504
10. Agreeing	0,222	.218	.077
<b>11. Directing</b>	<b>.044</b>	<b>.053</b>	.198
<b>12. Task Monitoring</b>	<b>.315</b>	<b>.125</b>	.169
<b>13. Structuring the Conversation</b>	<b>.15</b>	<b>.079</b>	.194
<b>14. Informing</b>	<b>.075</b>	<b>-.04</b>	-.04
<b>15. Visioning</b>	<b>-.477*</b>	<b>-.235</b>	<b>-.253</b>
<b>16. Intellectual Stimulation</b>	<b>-.145</b>	<b>-.216</b>	<b>-.264</b>
<b>17. Individual Consideration</b>	<b>.04</b>	<b>.046</b>	<b>-.106</b>
18. Humor	.348	.326	.383
<b>19. Positive Feedback</b>	<b>.687**</b>	<b>.382</b>	<b>.643**</b>
20. Personal Informing	.687	.324	.437

\* = 1 tailed p < .05

\*\*= 1 tailed p < .01

all normally distributed; therefore Spearman's rho is used (Corder and Foreman, 2009). The zero-order Spearman rho statistics of Table 4 and 5 provides an overview of the correlations. There is only one significant correlation in the relationship between the hypothesized leader behaviors and affective trust, and this pertains to giving positive feedback (hypothesis 4) ( $r = .572$ ,  $p < 0,05$ ). This means that our fourth hypothesis: 'A leader who gives more positive feedback scores higher on followers' affective trust in the leader' can be accepted. In hypothesis 1 we proposed: 'A leader who shows more visioning behavior scores higher on followers' affective trust in the leader.' This hypothesis is rejected. This is also the case for hypothesis 2: 'A leader who shows more intellectual stimulation behavior scores higher on followers' affective trust in the leader', and for hypothesis 3: 'A leader who shows more individual consideration behavior scores higher on followers' affective trust in the leader.' In addition, there are no significant correlations found between the observed task-oriented leader behaviors and cognitive trust. Thus, hypothesis 5, which proposed a positive relation between directing and cognitive trust, cannot be supported. Hypothesis 6: 'A leader who shows more task monitoring behavior scores higher on followers' cognitive trust in the leader', is also rejected. However, the duration in which task monitoring behavior occurred has a marginally significant and positive

correlation with cognitive trust ( $r = .436, p = 0.0595$ ). Hypothesis 7, which assumed to find a positive relation between informing behavior of the leader and cognitive trust, is also rejected. Hypothesis 8: 'A leader who shows more structuring behavior scores higher on followers' cognitive trust in the leader', can also not be accepted. Besides these findings, leadership effectiveness is positively correlated with transformational leadership ( $r = .572, p < 0.05$ ) and goal-focused leadership ( $r = .802, p < 0.05$ ). This supports our last hypothesis (9): 'goal focused leadership is positively related to cognitive trust in the leader.' We also found a significant positive relationship between leader effectiveness and cognitive trust ( $r = .683, p = .01$ ) and affective trust ( $r = .771, p < .01$ .) A surprising finding is that some behaviors, e.g. visioning, intellectual stimulation and individual consideration, might even have a negative relationship with affective trust.

## 5. DISCUSSION

This study differs from others through providing a more nuanced understanding of the role played by trust in the relationship between leader effectiveness and leadership style. While most studies on this subject typically conceptualized trust as a one-dimensional construct (i.e., research on trust has been dominated by cognition-oriented propositions, while affect-oriented propositions have been given less attention, Yang and Mossholder, 2010), we used a two-dimensional conceptualization of trust, comprising measures of cognitive and affective trust, as suggested by McAllister (2002). Dirks and Ferrin (2002), also urged 'to include multiple dimensions (affective and cognitive) within a single study and attempt to distinguish between processes involved' (p. 623). Affective trust grows over time, as a leader and a follower show reciprocated, genuine care and concern, developing a relational bond. Based on the extant literature, relation-oriented behaviors of a leader (e.g., visioning, intellectual stimulation, individual consideration and providing positive feedback) can be expected to enhance cognitive and especially affective trust. Leaders can for example motivate followers to contribute to the decision making-process and they can help followers with their individual problems, which in turn may enhance followers' relational bond with, and affective trust in the leader. In addition, task-oriented behaviors of a leader, such as directing, task monitoring, informing and structuring, should enhance cognitive trust. Cognitive trust is trust based on evidence of trustworthiness, available knowledge and good reasons serve as foundations for cognitive trust decisions (McAllister, 1995). A leader who shows mainly task-oriented behaviors do not focus on developing an emotional bond with followers, but, as stated

earlier, they focus on efficiency in the use of resources and personnel, and high reliability of operations, products and services.

The data used in this study was gathered with a unique method, which is rarely deployed in leadership studies; analyzing video-based leader behaviors captured during regularly held staff meetings. In addition, we made use of surveys to measure the perception of the followers on the leaders. Support for this study's hypotheses 4 and 9 add to the leadership theory as follows: leaders who provide more positive feedback to their followers scores higher on affective trust and leaders with a goal focused leadership style seem to engender cognitive trust.

Besides these findings, we find a positive relationship between transformational leadership and affective trust, solely based on followers' surveys. This is in line with a recent study of Zhu et al. (2013).

The first hypothesis is about leaders' score on affective trust in relation with visioning behavior towards followers. There was a marginally significant difference in behavior between leaders with a high score on affective trust in comparison with leaders who scored low on affective trust. Surprisingly, leaders who showed more visioning behavior scored lower on affective trust. We also found that visioning behavior of the leaders was negatively and significantly related to leader effectiveness. Leaders can articulate visions that may be insufficient connected with reality, which may reduce followers' trust in their leader. Previous research in a large public sector organization of Rafferty and Griffin (2004), suggest that articulating a vision does not always have a positive influence on followers. They also suggest that one should distinguish between "strong" and "weak" visions as well as vision content to explain their effectiveness. Future research is needed to explore conditions, such as a confronting-, meeting- or mechanistic context, under which articulating a vision positively impacts followers affective trust and when negatively.

The second hypothesis examines the relation between intellectual stimulation behavior and the leaders' scores on affective trust. There was a significant difference in the frequency and duration of this behavior; the direction of the relationship was negatively, indicating that less intellectual stimulation behavior was shown by leaders with a high score on affective-based trust. Podsakoff et al. (1990) found that intellectual stimulation was negatively associated with a number of employee attitudes, including trust in the leader and satisfaction. They explained this by suggesting that intellectual stimulation is associated with higher levels of role ambiguity, conflict, and stress in the workplace. Leaders who frequently encourage followers to challenge their assumptions and search for new ways of doing things can produce desirable effects in the long run, but in the short run it may create ambiguity, conflict, or other forms of stress in the minds of the followers. 'If the increased task demands produced by a leader's intellectual stimulation behavior increase stress, ambiguity, and conflict, we might expect that followers will express less trust in the leader and engage in fewer OCBs. Indeed, this is consistent with recent research (cf. Cohen, 1980; Motowidlo, Packard, & Manning, 1986) that suggests that stress induced by increased task demands decreases interpersonal sensitivity and helping behavior (Podsakoff et al., 1990 p. 135).' Besides, intellectual stimulation can be of a destabilizing nature itself; followers are stimulated to challenge their old and perhaps comfortable assumptions. Podsakoff et al. (1990) stated that this challenging process may be dissatisfying, and that leaders who continually do this are trusted much less because they are perceived as being less predictable and/or dependable (p.136).

The third hypothesis deals with a typical behavior of a transformational leader; individualized consideration. As noted earlier, individual consideration is possibly the most noticeable way for leaders to create a relational bond with his followers. The results for this hypothesis were not significant. A possible reason is that the data is obtained from a public sector organization, where hierarchy is more important and relational based behaviors are thought to be

less important. However, more research is needed to explain why individualized consideration does not have a significant impact on explaining affective trust, while the other behaviors have.

The hypothesis about the task-oriented behaviors were all linked to cognitive trust. Hypothesis 5 assumed to find that a leader who sets clear directions scores higher on followers' cognitive trust in the leader. Hypotheses 7 assumed to find that a leader who shows more informing behavior scores higher on followers' cognitive trust in the leader. And hypotheses 8 assumed to find that a leader who shows more structuring behavior scores higher on followers' cognitive trust in the leader. These task-oriented behaviors did not show any significant correlation with leadership effectiveness or cognitive trust. Compared to affective trust, cognitive trust is more challenging to sustain once it is developed (McAllister, 1995). Followers could have high levels of cognitive trust in their leaders, who may experience a problem completing a task on time, resulting in little cognitive trust or no cognitive trust at all. Or, as observed by Holmes and Rempel (1989), once a high level of affect-based trust has developed, a foundation of cognition-based trust may no longer be needed. Therefore, when a leader shows more task-oriented behavior this does not significantly impact the perception of cognitive trust.

The sixth hypothesis concerning task-monitoring behavior resulted in a significant difference in the frequency in which this behavior occurred; leaders with followers who scored higher on cognitive trust did more often show task monitoring behavior. This indicates, as expected, a positive direction between the two variables. The frequency in which task monitoring behavior occurred has a marginally significant, positive correlation with cognitive trust and is significantly related to leader effectiveness. This is in line with some expectations in the extant literature, which found that leaders who showed more monitoring behavior were more effective (Komaki, 1986; Komaki et al., 1989). Another study of Bijlsma and van de Bunt (2003) also found that followers' trust in leaders is positively related to monitoring by leaders. There are also studies that found that followers dislike negative task-directed monitoring behavior, especially in a group-context (e.g., Van Der Weide and Wilderom, 2004). A possible explanation for these contrary findings may be that followers respond negatively to the controlling aspect of monitoring but may respond positively if they perceive task monitoring to be part of the managerial job of maintaining fairness (Niehof and Mooreman, 1993).

We also found that the frequency in which task monitoring occurred is significantly related to affective trust in the leader (.466,  $\rho < 0,05$ ). There was initially no hypothesis about this relationship, but a possible reason for this significant positive relationship is that followers may perceive task monitoring as genuine careful attention to their work and task monitoring may lead to more communication between leaders and followers. This, in turn, could enhance followers' affective trust in the leader.

## 5.1 Practical Implications

Analyzing precisely video-coded behaviors of leaders gives us insight into which behaviors are more effective during regular staff meetings and which are less effective. When leaders become aware of the sort behaviors they should display during staff meetings, they are inclined to develop themselves. Hence, findings of this and similar type of

studies could become part of leadership development programs. Providing positive feedback behaviors deserve particular emphasis in the leader's repertoire as it seems to enhance affective trust and leader effectiveness. There are also behaviors for leaders to avoid or reduce, and solely based on the outcome of this study, one may point to the variable articulating a vision. However, there is an extensive literature that shows that articulating vision is actually beneficial for rather than detracting from unit or organizational performance (e.g., De Cremer and Van Knippenberg, 2002). Hence, the degree to which team leaders or middle managers articulate vision during staff meetings seems in need of further study before much practical advice on this score is legitimized.

Additionally, organizations should not simply promote only transformational leadership behavior without seeking to understand how it may impact the development of affective trust. Leaders should be aware that visioning and intellectual stimulation might have negative impact on affective trust and that the monitoring behavior has a positive relation with affective trust and a marginally positive relation with cognitive trust. Additionally, the goal-focused leadership style showed to have a positive relation with cognitive trust. This research add substantial knowledge to the limited existing research on how a leader should behave to enhance followers' cognitive- and affective trust in him/her, and leader effectiveness.

## 5.2 Strengths, limitation and future research directions

The strength of this research is that we made use of different data sources and methods (surveys and video-based coding), which reduced common method bias. Objective video-based coding helps to get a deeper understanding of how leaders actually behave during staff meeting. Besides, subjective surveys of followers gave us insight in their perceptions about the leaders' effectiveness, affective and cognitive trust. While the mix of objective and subjective methods strengthens this research; there are various limitations.

First, the cross-sectional nature of the present study makes it hard to discover the true direction of causality between the variables used. Future research may adopt a longitudinal study design, which can help to examine the incremental developmental processes of followers' cognitive and affective trust in leaders.

A second limitation of this study is the small sample size. A sample of 14 leaders is not enough to generalize, and certainly not beyond the confines of this study. There needs to be more research done with comparable methods and larger samples to strengthen the results.

The generalizability of this study may also be limited to other countries, because the leaders, followers and coders in this study were all Dutch. In the Western countries there is a more individualistic culture, therefore it is of interest to examine whether our findings are replicable in more collective cultures, in which relational aspects of work relationships are more important.

The generalizability of this study may also be limited due the fact that the sample was drawn from a public organization. Different leader behaviors may be perceived as effective by followers within a public organization. For

example, a relational based leadership style is thought to be less effective in the public sector (Bass and Riggio, 2006). Therefore future research should be conducted in a larger number of organizational and industrial contexts.

Another limitation of this study is that the video-coded behaviors of the leader may suffer from social-desirability bias. We were aware of this, and asked the followers right after the meeting to rate the extent to which the leader behaved as he or she normally did. The response categories ranged from 1 (not representative) to 7 (highly representative). From the results (average score of 5,57 and SD=1.34) we can derive that the amount of leader reactivity during the video-observation was limited. This assumption was also disconfirmed by Smith, McPhail and Pickens (1975); they showed that only marginal reactivity occurred when using the video camera as a mode of observation.

New research should focus on the conditions (e.g. taking into account potential moderators like age, gender and education level) under which visioning and intellectual stimulation behaviors have a positive impact on followers' affective trust in the leaders, and the conditions under which they have a negative impact. Additionally, future research must make use of leader expert raters to examine leaders' effectiveness more accurately.

### 5.3 Conclusions

The present study highlights meaningful implications for how leaders would need to behave in order to create cognitive and affective trust in followers and high leader effectiveness. These findings are of interest because trust in a team has shown to have important consequences. It has not only shown to have influences on perceived leader effectiveness, but previous research also highlighted the importance of trust on processes such as organizational citizenship behaviors (Dirks and Ferrin, 2001), improved team performance (Dirks, 1999, 2000) and organizational performance (Rich, 1997; Shaw, 1997). This study distinguishes itself from other studies by using inter-reliably coded video-based field observations as data, as a supplement to the utilized survey measurement. Our aim is to contribute to leadership theory by offering some initial insights regarding the type of leader behaviors that positively and negatively contribute to leader effectiveness, and to the two dimensions of trust. We included two dimensions of trust because they are different in nature (McAllister, 1995), and could therefore have different effects on the process in which followers perceive trust in the leader. Affective trust is linked to relations-oriented behaviors (i.e., visioning, intellectual stimulation, individualized consideration and providing positive feedback) and cognitive trust is linked to task-oriented behaviors (i.e., directing, task monitoring, structuring and informing). As expected, providing positive feedback to followers has a positive impact on both affective-based trust and leader effectiveness, and is therefore highly recommended to demonstrate more often by leaders during regular staff meetings. Surprisingly, visioning and intellectual stimulation behavior may have some negative impact on the degree of affective trust followers have in their leaders. Previous research of Rafferty and Griffin (2004) also showed that articulating a vision does not always have a positive influence on followers. Also research of Podsakoff et al. 1990 found that intellectual stimulation was

negatively associated with trust in the leader. Besides these findings, leaders should also pay attention to the positive relationship between the frequency in which monitoring behavior occurred and cognitive trust and leader effectiveness. We also found a positive relationship between monitoring and affective trust. These findings give leaders more insight in how they may need to behave during regular staff meetings in order to create cognitive and affective-based trust and therefore higher leader effectiveness.

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## Appendix A

Behavior category		Behavior	Definition	Examples
Self-defending	1	Showing disinterest	Not showing any interest, not taking problems seriously, wanting to get rid of problems and conflicts	Not actively listening, talking to others while somebody has the speaking term, looking away
	2	Defending one's own position	Protecting the own opinion or ideas, emphasizing the own importance	"We are going to do it in my way." Blaming other people
	3	Providing negative feedback	Criticizing	"I do not like that..." "But we came to the agreement that..."
Steering	4	Disagreeing	Contradicting ideas, opposing team members	"That is not correct" "I do not agree with you"
	5	Agreeing	Saying that someone is right, liking an idea	"That is a good idea" "You are right"
	6	Directing	Telling others what (not) to do, dividing tasks	"I want that" "Kees, I want you to" Interrupting
	7	Verifying	Getting back to previously made agreements/ visions/ norms	"We came to the agreement that..."
	8	Structuring the conversation	Giving structure by telling the agenda, start/end time etc.	"The meeting will end at..." "We are going to have a break now"
	9	Informing	Giving factual information	"The final result is ..."
	10	Visioning	Giving the own opinion Giving long-term visions	"I think that..." "Within the next years, we want to..."
Supporting	11	Intellectual stimulation	Asking for ideas, inviting people to think along or come up with own ideas, brainstorming	"What do you think is the best way to...?" "What is your opinion about...?"
	12	Individualized consideration	Rewarding, complimenting, encouraging, being friendly, showing empathy	"Good idea, thank you" "You did a great job" "Welcome" "How are you?"
	13	Humor	Making people laugh, saying something with a funny meaning	Laughing, making jokes
	14	Positive feedback	Rewarding, complimenting	"Well done"
	15	Personally informing	Giving non-factual, but private information	"Last weekend, my wife..."