# The effects of cognitive and affective trust on follower behavior and effectiveness

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## ABSTRACT

This study examines the effects of trust on the relationship between follower behavior and follower effectiveness. A distinction was made between cognitive and affective trust and between task-oriented and relation-oriented behavior. In this cross-sectional study 2 methods were used: 1) surveys that measured followers perception of the performance of the leader; and 2) coded video-observations of regular staff meetings. The data was used from a sample consisting of 622 followers employed in a large Dutch public sector organization. Positive relationships were found between affective and cognitive trust and follower effectiveness, and between relation-oriented behavior and follower effectiveness. Inconsistent with the hypotheses no relationship was found between task-oriented behavior and follower effectiveness. Also the expected moderating effects of cognitive and affective trust were not found. In the discussion possible explanations for the non-significant relationships and suggestions for further research are given.

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## Keywords
Cognitive trust, affective trust, task-oriented behavior, relation-oriented behavior, follower effectiveness

# 1. INTRODUCTION

In the organizational sciences, much research attention has been devoted to understanding the predictors of leader effectiveness. Numerous studies have been written on how to develop and improve leader effectiveness within organizations. A high level of leader effectiveness is important for an organization because it can lead to better team performance and organizational performance (Yukl, 2012). However, recent studies show that also followers can play an important role in team and organizational effectiveness (Uhl-Bien, Riggio, Lowe & Carsten, 2013). Followers can be essential for leadership, because they can be seen as recipients or moderators of the leaders' influence (Uhl-Bien, Riggio, Lowe & Carsten, 2013; Bass, 2008).

There are numerous factors, which can influence leader and follower effectiveness. One of these factors is trust (Schaubroeck, 2011). Earlier studies showed that trust could have a positive influence on coordination and control in the organization at both institutional (Shapiro, 1987, 1990; Zucker, 1986) and interpersonal levels (Granovetter, 1985; Pennings & Woicehyn, 1987). Research on trust has developed in diverse domains like marketing, management, sociology and operations management knowledge domains (Bachmann and Inkpen, 2011; Zur et al., 2012; Swift & Hwang, 2013). Because followers can be considered essential for leadership, the trust relationship between leaders and followers could also have a positive influence on follower effectiveness.

The definition of trust is very broad. Trust is defined as: 'a psychological state comprising an intention to accept vulnerability based upon positive expectations about the behavior of another' (Rousseau, Sitkin, Burt, & Camerer, 1998, p. 395). But this concept is difficult to measure. Therefore this study wants to make a distinction between cognitive and affective trust (McAllister, 1995). It is important to study both types of trust because they might have different effects on follower effectiveness.

In addition to affective and cognitive trust another aspect with regard to the follower, is the behavior that the follower displays in the team. Behavior can be divided into task-oriented behavior and relation-oriented behavior (Yukl, 2012). Task-oriented behavior was sometimes denoted by initiating structure or production-centered while the terms used for relation-oriented behavior are consideration and employee-centered (Fleishman, 1953; Halpin & Winer, 1957; Likert, 1961). The main goal of task-oriented behavior is accomplishing work in an efficient and reliable way (Yukl, 2012). Relation-oriented behavior is more focused on increasing the quality of 'human capital' (Yukl, 2012). It is important to look at this full range of behavior and not just one aspect of behavior.

## 1.1 Goal of the Study

With this study we aim to contribute to the literature in the following way:

1. In this study we combine video-observation and surveys to assess the behavior of the followers as well as their perceptions of trust in the leader. Taking such a multi-method approach is valuable because with the use of video-observation, wit is possible to directly observe the behavior of followers. In earlier research most researchers have used perceptual measures. These perceptual measures can differ a lot from actual behavior of followers. (Carsten & Uhl-Bien, 2013; Sy, 2010; Carsten et al. 2010) Perceptual measures make less objective judgments about the behavior of followers because every leader or follower has a different perception of the situation/behavior etc.

In earlier studies, Perceptual measures have been frequently used to measure the perception of the leader and not of the follower (Casten & Uhl-Bien, 2013).

2. There is a lot of information about leaders and leadership in the literature, but there is less known about the role of the follower and especially effective followership. Followership has remained an undervalued and underappreciated concept among management development practitioners, researchers and in organizations (Agho, 2009). Therefore this study wants to focus on examining follower effectiveness. By looking at trust and the behavior of the follower, knowledge can be obtained on how to improve follower effectiveness.

3. This study uses cognitive and affective trust as a moderator, which through follower behavior can lead to follower effectiveness. This approach is not been used in the literature yet. This approach can be important, because this way the variables are not only tested on correlation, but also on moderation, which could have different a effect on follower effectiveness.

This study also has practical relevance. Managers and leaders can use this study to learn on which aspects of the relationship with the follower, they have to focus to create a higher level of follower effectiveness. This might increase organizational performance and enhance the competitive advantage.

The research question we want to answer in this study is:

*What are the effects of cognitive and affective trust on the relationship between task-oriented and relation-oriented follower behavior on follower effectiveness?*

# 2. THEORY AND HYPOTHESES
## 2.1 Cognitive and Affective Trust

McAllister (1995) stated that there are two principal forms of interpersonal trust: affect-based and cognitive based trust.

Cognitive trust is about reliability and dependability. These factors have to be met before a trust relationship can be developed (McAllister, 1995). Cognitive trust concerns the beliefs regarding other's ability and reliability to accomplish a task (Kanawattanachai & Yoo, 2007; Zhu & Akthar, 2013).

The second dimension of trust is affective trust. Affective trust can be build when individuals express genuine care and concern in trust relationships (McAllister, 1995). It can be seen as a social exchange process and it shows a sense of obligation to reciprocate and reinforce emotional bonds between leaders and followers (Blau, 1964).

McAllister (1995) founded evidence that his framework supported the distinction made between the two forms of trust (cognitive and affective), and he arguments that each form should be understood. Also Schaubroeck et al. (2011) stated that both affective and cognitive trust have been independently related to transformational leadership. These studies also explored the impact the two kinds of trust have on each other. McAllister (1995) stated that some level of cognitive trust might be necessary for affective trust to develop.

Results of studies have showed that cognitive and affective trust could for example led to less manager need-based monitoring, manager affiliative and assistance citizenship behavior (McAllister, 1995), helping behavior of followers (Zhu & Akhtar, 2013) and psychological safety (Schaubroeck, 2011).

## 2.2 Cognitive and Affective Trust and Follower Effectiveness

Cognitive trust could give followers a sense of confidence about the leaders' decisions and actions (Mayer, Davis, & Schoorman,

2005). When this confidence is high it can lead to more follower effectiveness because followers are expected to be more motivated to do their job. If followers have confidence that their leader has the right expertise and professionalism this might increase their own task performance. (Kramer, Brewer, & Hanna, 1996; Chou et al., 2013; Kanawattanachai & Yoo, 2007) When a follower doubts the competence and professional preparation of the leader to do the job, the follower has a bad example and might do his/her work less precisely. This can be due to the fact that the follower thinks that the leader does not have the competence to see that the work is being done less precisely.

Because of this, we expect that a high level of cognitive trust will result in higher follower effectiveness. This can be due to the fact that the follower thinks that the leader is competent in giving him the right tasks to do, so the follower can add value to the organization.

A high level of cognitive trust can also lead to high job satisfaction. Job satisfaction arises from followers' cognitive appraisal of the work situation against their expectations of what is fair (Organ, 1988). Hence, when followers are confident in the leaders' ability, reliability and skills, they are more likely to judge their work experiences in a favorable light (Yang, 2009). Cognitive trust in the leader can thus enhance followers' job performance.

Because of this, we expect that a high level of cognitive trust will result in higher follower effectiveness. Accordingly,

*Hypothesis 1a: Cognitive trust is positively related to follower effectiveness*

Affective trust can be described as a 'feeling of emotional security, relying on faith in the interaction'. (Lu, 2014, p 382). Affective trust emphasizes empathy and affiliation on the basis of personal bonds and feelings for the other person (SchauBroeck, 2011; Yang et al., 2009). Affective trust can be created when a leader frequently interacts with the followers informally or socially and the follower feels that he or she has the freedom to talk with the leader about problems or difficulties at work. (McAllister, 1995) Both the leader and the follower have to make emotional investments in the working relationship to create high levels of affective trust (Yang et al., 2009; Zhu & Akthar, 2013)

When a leader frequently interacts with the follower and the follower can talk freely etc., this can create a feeling of psychological safety. Psychological safety means that that the environment is safe for interpersonal risk taking (Edmondson, 1999). Followers believe they can talk openly and actively with their leader, without fear of suffering adverse personal consequences, such as being derogated for their ideas or the way in which they express them. (Schaubroeck, 2011) These characteristics correspond to affective trust. Trust is needed for psychological safety to develop. (Edmonson, 2004) When affective trust and psychological safety are present, this can lead to the use of more effective performance strategies and follower tendency to become more psychologically engaged in their tasks (Edmondson, 1999).

Affective trust can also have a positive effect on job satisfaction. The affective component of job satisfaction captures followers' positive or negative feelings about their work. When followers have a good work relationship with their leader, than their affective experience of work could be enhanced (Yang, 2009). Furthermore affective trust can influence perception, and interpretation of information (Brosche et al., 2010; Parayitam and Dooley, 2009), and it can encourage knowledge/idea sharing, facilitate communication, and participation (Swift and Hwang, 2013).

All these things can lead to higher follower effectiveness. Accordingly,

*Hypothesis 1b:Affective trust is positively related to follower effectiveness*

## 2.3 Task-oriented and Relation-oriented Behavior

Next to trust, also follower behavior can have a great impact on follower effectiveness. Uhl-Bien et al. (2013), have made an overview of follower behaviors and followership available in the literature. Examples of this are research into leader-member-exchange, voice behavior and organizational citizenship behavior.

Between 1950 and 1980 research on leadership behavior found support for two broad categories of leader behavior: task-oriented and relation-oriented behaviors (Yukl, 2012). These categories have not yet been used in studies into followership, but followers can also show these types of behaviors. Carsten et al. (2010) did research into passive, active and proactive followers. Passive followers showed a lack of responsibility, decision-making and stress, while pro-active followers expressed the desire to take initiative and accountability. These pro-active behaviors are comparable with task-oriented behaviors. They can increase follower effectiveness because the work can be done in a more efficient way.

According to Yukl (2012), the most important goal of task-oriented behavior is to accomplish work-tasks in an efficient and reliable way. Task-oriented behavior has four components: clarifying (i.e., verifying/informing), planning (i.e, directing), monitoring operations (i.e, task monitoring) and problem-solving (encompasses a broader variety of behaviors). Clarifying, by setting clear, specific and challenging but realistic goals can lead to higher performance and effectiveness. Planning is about the scheduling of activities and assigning tasks. With the use of scheduling and assigning, delays, duplication of effort and wasted resources can be avoided. With the use of monitoring, problems and opportunities can be identified. This information can be used to determine if changes are needed in planning or procedures. The last aspect, problem solving, can be used to identify to determine how problems can be avoided, and how to minimize their adverse effects. These components will probably lead to higher follower effectiveness, because this way delays can be avoided, and the work can be done in a more efficient way, which gives more time for core business activities. Accordingly,

*Hypothesis 2a: Task-oriented behavior is positively related to follower effectiveness*

The second behavioral category is relation-oriented behavior. According to Yukl (2012) the most important goal of relation-oriented behaviors is to increase the quality of human resources and relations. Relation-oriented behavior also has four components: supporting (i.e., personal informing, individualized consideration), developing (i.e., intellectual stimulation), recognizing (i.e., humor, positive feedback) and empowering (ie., intellectual stimulation). Supporting can be used to show concern, build cooperative relationships and help people cope with stressful situations. When a follower shows this behavior, it is likely that he/she feels valued in the organization and this kind of behavior can lead to a higher effectiveness of the follower. Developing is of importance for follower effectiveness because it can help followers to improve their skills and apply new skills on the job. Recognizing can be used to show appreciation to others for effective performance,

achievements and other important contributions to the organization. When a follower is in this way more involved with organization this can lead to higher follower effectiveness. The last component is empowering. When followers have more autonomy and influence over decisions in their work this can lead to a higher follower job satisfaction. One empowering decision procedure is consultation. Also the use of consultation can lead to better decision-making. Consultation includes asking other people for ideas and suggestions and taking them into consideration before making a decision. (Yukl, 2012)

When a follower shows all these aspects this will probably lead to a better effectiveness. Accordingly,

*Hypothesis 2b: Relation-oriented behavior is positively related to follower effectiveness.*

## 2.4 Cognitive and Affective Trust and Task-oriented Behavior

The beliefs of the follower about the leader's competence are seen as the most important element of cognition-based trust in the leader (SchauBroeck, 2011). Followers make judgments about a leader's characteristics, such as their integrity, dependability, and ability. These judgments can influence their sense of vulnerability in the relationship between the leader and the follower (Colquitt et al.,2012; Schoorman, Mayer, & Davis, 2007). When this sense of vulnerability is low, followers may feel comfortable to engage in task-oriented behaviors because they believe that leaders have integrity, are dependable and reliable (Mayer et al., 1995; Poon, 2006).

When followers have a high level of cognitive trust in the leader, they could be confident that the leader is competent to handle task-related problems or removing work-related obstacles. This makes it easier for the follower to follow the job directives of the leader, to take responsibility for their work and channel task-relevant efforts toward established goals (Yang et Al, 2009). This behavior can lead to higher follower effectiveness, because the follower can work in more efficient way. Hence, whether the task- or relation oriented behavior of followers is effective, might be dependent upon their perception of the leaders cognitive and affective capabilities.

Yang et al. (2009) stated in their study that cognitive trust is of greater relevance for task-oriented exchange processes. But because we think that cognitive trust also positively influences affective trust, we expect that affective and cognitive trust both positively moderate the relationship between task-oriented behavior and follower effectiveness. Hence, when a follower has a high level of cognitive and affective trust in their leader, their shown task-oriented behavior might have a stronger positive effect on their performance. Accordingly,

*Hypothesis 3a: cognitive and affective trust positively moderates the relationship between task oriented follower behavior and follower effectiveness.*

## 2.5 Cognitive and Affective Trust and Relation-oriented Behavior

Most research on follower behavior focused on concepts like organizational citizenship behavior and helping behavior. Podsakoff et al. defined organizational citizenship behavior as 'voluntarily helping others with, or preventing the occurrence of work-related problems' (Podsakoff et al., 2000, p. 516). Helping behavior can be seen as having some of the key elements of citizenship behavior in terms of 'voluntarily helping others with, or preventing the occurrence of work-related problems' (Podsakoff et al.,, 2000, p. 516). When followers signal the strong personal ties they share with their

leader, they are probably more willing to help coworkers (Poon, 2006).

This is to some extend comparable with relation-oriented behavior. While organizational citizenship behavior and helping behavior are more focused on the altruistic aspects within the work environment, relation-oriented behavior is geared to establishing relationships by showing consideration for others etc. (Yukl, 2012). So organizational citizenship behavior and helping behavior are examples of the components: supporting, empowering and recognizing of relation-oriented behavior.

One of the elements of affective trust is social exchange with the leader. When followers view their exchange with the leader as pro-social, they can feel the obligation to do a favor in return, by performing citizenship behavior (Farh, Podsakoff, & Organ, 1990; Organ, 1990). Examples of follower citizenship behavior are pass on new information to a person, take time to listen to problems and worries of a person and willing to help an individual, even at some cost to personal productivity.

For followers, helping behavior can be seen as a form of social exchange proces. Affect-based trust might deepen the leader-follower social exchange process (Blau, 1964) and inspires followers to go the extra mile (Colquitt et al., 2012; Konovsky & Pugh, 1994).

Hence, the follower's relation-oriented behavior might be more effective when he or she has a high affective trust in the leader.

Affective trust involves empathic and affiliate ties and therefore of greater impact for relation-oriented behavior than cognitive trust (Yang et. Al 2009). But earlier studies showed that affective trust is influenced by cognitive trust. For example McAllister (1994) showed a strong positive relation of cognition-based trust on affect-based trust. Also the results of the study of Zhu and Akhtar (2014) indicated that both affect-based and cognition-based trust mediated the relationship between transformational leadership and followers' helping behavior. Because of this, we expect that both cognitive and affective trust have an influence on the relationship between relation-oriented behavior and follower effectiveness. Accordingly,

*Hypothesis 3b: Cognitive and affective trust positively moderates the relationship between relation-oriented behavior and follower effectiveness.*

# 3. METHOD
## 3.1 Design of the Study
In the present cross-sectional study design, two different sources of data are used: a survey that measured followers' perception of the leader and of themself, and video observations of followers' and leaders' behavior during staff meetings. By systematic video coding, various behaviors of the leaders and followers have been observed.

## 3.2 Sampling
The follower sample consisted of 622 employees who worked in a large Dutch public sector organization. The sample was comprised of 362 male (58,2%) and 215 female (34,6%) followers and the followers were on average 49 years old, ranging from 19 to 65 (SD= 10.3) In total 51 team meetings were recorded and analyzed.

The leaders and followers were asked, directly after the video recorded staff meeting, to fill in a survey. In this survey, they were asked questions about, among others, their cognitive and affective trust in the leader.

In total, 587 followers filled in the survey, which results in a response rate of 94.37%.

## 3.3 Measures

### 3.3.1 Cognitive and affective trust

The measures used for cognitive trust and affective trust are adapted from the scale developed by McAllister (McAllister, 1995). For cognitive trust, six measures are used.

The six propositions followers had to answer were:

- 'This person approaches his/her job with professionalism and dedication',
- 'Given this person's track record, I see no reason to doubt his/her competence and preparation for the job'
- 'I can rely on this person not to make my job more difficult by careless work'.
- 'Most people, even those who aren't close friends of this individual, trust and respect him/her as a coworker.'
- 'Other work associates of mine who must interact with this individual consider him/her to be trustworthy.'
- 'If people knew more about this individual and his/her background, they would be more concerned and monitor his/her performance more closely.'

For affective trust, five measures are used. The propositions were:

- 'We can both freely share our ideas, feelings, and hopes.'
- ' I can talk freely to this individual about difficulties i am having at work and know that (s)he will want to listen.'
- 'We would both feel a sense of loss if one of us was transferred.'
- 'If I shared my problems with this person, I know (s)he would respond constructively and caringly.'
- 'I would have to say that we have both made considerable emotional investments in our working relationship.'

Followers were asked to rate their trust in their leader (cognitive trust and affective trust), based on a seven-point scale from 1 (strongly disagree) to 7 (strongly agree). In order to test the reliability of the results with respect to cognitive trust and affective trust, the Cronbach's al-pha is calculated. This measurement indicates the degree of consistency between various items that measure the same concept. A Cronbach's alpha of 0.6 or higher is used as a rule of thumb for sufficient consistency (Field, 2005). The measure for cognitive trust ($\alpha$ = 0.91) and affective trust ($\alpha$ = 0.86) are sufficiently consistent. So it can be concluded that the results with respect to these concepts will be reliable.

### 3.3.2 Follower effectiveness

Follower effectiveness was measured by the answers given by the leader during a feedback session. Therefore the validated scale developed by Gibson et al. (2009) was used. The leader was given a photo of each follower. By each photo the leader had to rate the following four propositions:

- 'This follower is effective.'
- 'This follower makes few mistakes.'
- 'This follower delivers work with high quality.'
- 'This follower continuously performs at a high level.'

The response categories ranged from 1 (not representative) to 7 (highly representative).

The Chronbachs alpha of follower effectiveness was 0.93. This number indicates that the results with respect to follower effectiveness will be reliable.

### 3.3.3 Task-oriented behavior & relation-oriented behavior

In order to observe the task-oriented and relation-oriented behaviors of the followers, the followers were all video recorded during a regular staff meeting. The 51 staff meetings were coded and analyzed with the use of the behavioral software program "The Observer XT". This program has been developed for the analysis, management and presentation of observational data (Noldus et al., 2000), The recorded videos were precisely coded and analyzed. In order to avoid subjectivity bias, all videos were at least observed and coded by two independent students. The results were compared and significant differences were discussed and recorded. The two independent observers 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.

The detailed, pre-set behavioral observation schema, was designed and developed in previous studies to capture specific leadership behaviors during the daily work practices (e.g. Gupta et al., 2009; Hoogeboom et al. 2009; Van der Weide, 2007; Hoogeboom & Wilderom, 2015).

Bales (1950) and Borgatta (1964) have developed the solid base for this coding scheme. They observed the interaction processes between the leaders and their followers. 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. Their 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 behavioral taxonomy of Yukl et al. (2002) was used as well.

The team meetings were 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. To be sure that there were indeed no reactivity assumptions, we also asked the followers about the representativeness of the meeting 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 5.7 (SD= 1.06), indicating that the meeting was representative.

The task-oriented and relation-oriented behaviors were coded on the basis of how often a specific behavior occurred; the frequency of the behavior. The following behaviors were defined as task-oriented behaviors:

- Directing
- Delegating,
- Verifying,

- Informing,
- Structuring the conversation.

The relation-oriented behaviors are represented by:

- Intellectual stimulation
- Personal informing
- Humor
- Individualized consideration
- Positive feedback.

# 4. RESULTS

## 4.1 Means

The results show that on average 44.69% of the displayed behavior of the followers within a team is task-oriented behavior (SD=9.67) and 10.54% is relation-oriented behavior (SD =4,52). This means that on average, followers have shown more task-oriented behavior than relation-oriented behavior during the staff meetings.

The average cognitive trust in the leader is 5.54 (SD=0.86) on a scale from 1 to 7. The affective trust of the followers in the leader is on average 5.64 (SD=0.9).

Also the mean follower effectiveness has been measured. This was measured on a scale from 1 to 10. The mean follower effectiveness was 7.12 (SD= 1.22).

## 4.2 Test of Normality

A test of normality was conducted on all aggregated variables to see if they followed a normal distribution. The Shapiro-Wilk test was used because this is the most powerful normality test (Razali & Wah, 2011). The results showed that cognitive trust was not normally distributed. Therefore a log-transformation was used on this variable. The results are presented in the table in the appendix.

After the log-transformation the significance of cognitive trust was still lower than 0.05. Therefore we rejected the null hypothesis of a normal distribution.

## 4.3 Correlations

Because cognitive trust was not normally distributed, the Spearman's rho test was used to see if there were correlations between the variables. Table 1 shows the results of this test. The results show positive correlations (except the relationship between task-oriented behavior and relation-oriented behavior) between the variables, but not very strong relationships. The relationships between cognitive trust and follower effectiveness, between affective trust and follower effectiveness, and between cognitive trust and affective trust are only significant at 0.01 level.

## 4.4 Regressions

The regression analyses are presented in table 2. Model 1 shows the regression analysis for of all the independent variables

together: cognitive trust, affective trust, task-oriented behavior and relation-oriented behavior. The dependent variable is follower effectiveness. The results show that the significance level is below 0.05, which indicates that the result is significant. These results indicate that a high level of the independent variables affective trust, cognitive trust, task-oriented behavior and relation-oriented behavior could led to higher follower effectiveness.

Model 2 shows that there is a positive relationship between cognitive trust and follower effectiveness (ß=0.46) the significance is lower than 0.05 (sign=0.01) and therefore we *hypothesis 1a: Cognitive trust is positively related to follower effectiveness* is accepted. There is also a positive relationship between affective trust and follower effectiveness (ß=0.59). Because the significance level is below 0.05 (0.001), we can also accept *hypothesis 1b: Affective trust is positively related to follower effectiveness*.

Model 3 shows the relationships between behavior and follower effectiveness. There was a small positive relationship found between task-oriented behavior and follower effectiveness (ß=0.29), but the p-level was non-significant ($p$ =.140) Therefore we have to reject *hypothesis 2a: Task-oriented behavior is positively related to follower effectiveness*. The relationship between relation-oriented behavior and follower effectiveness is also positive (ß=0.44) and the significance level is below the requested 0.05 (0.063). Therefore also *hypothesis 2b: Relation-oriented behavior is positively related to follower effectiveness* is accepted.

**Table 1. Spearman's Rho Correlations**

|  | 1. | 2. | 3. | 4. | 5. |
|---|---|---|---|---|---|
| 1. Cognitive trust |  |  |  |  |  |
| 2. Affective trust | .84** |  |  |  |  |
| 3. Task-oriented behavior | .26 | .27 |  |  |  |
| 4. Relation-oriented behavior | .21 | .23 | -.09 |  |  |
| 5. Follower effectiveness | **.52**\*\* | **.62**\*\* | **.33** | **.41**\* |  |

*. Correlation is significant at the 0.05 level (2-tailed)

**.Correlation is significant at the 0.01 level (2-tailed

**Table 2. Regression Analyses Follower Effectiveness**

|  | Model 1 | Model 2 | Model 3 |
|---|---|---|---|
| Cognitive trust | -.11 | .46* |  |
| Affective trust | .53* | .59* | .29 |
| Task-oriented behavior | .13 |  | .44* |
| Relation-oriented behavior | .30 |  |  |
| R total | .66* | .59* | .28 |
| R2 | .44 | .34 | .08 |

*p < .05, two tailed

**Table 3. Regression analyses moderation follower effectiveness**

| Column1 | Model 1 | Model 2 | Model 3 |
|---|---|---|---|
| Task-oriented behavior x cognitive trust | -.40 | -.40 |  |
| Task-oriented behavior x affective trust | -.00 | -.06 |  |
| Relation-oriented behavior x cognitive trust | -.25 |  | -.27 |
| Relation-oriented behavior x affective trust | .00 |  | -.07 |
| R | .51 | .45 | .34 |
| R2 | 0.26 | .20 | .12 |

## 4.5  Moderation

After the normal regression analysis another analysis was conducted to test if the variables cognitive and affective trust moderate the relationship between task-oriented behavior and follower effectiveness. Because of the small sample size this moderation test was conducted separately from the other regression analysis. The results are presented in table 3.

Model 1 shows an analysis with all the independent variables (including the moderating effects) to see if they had an impact on follower effectiveness. There is a positive relationship (0.5108) between the independent variables and the dependent variable, but the relationship is not significant (0.12).

There is too little evidence to hypothesize a relationship between task-oriented behavior, relation-oriented behavior and follower effectiveness, moderated by cognitive and affective trust.

Model 2 shows the results for the moderation of trust on task-oriented behavior. The relationship is 0.45, but the significance level is slightly above the requested 0.05. (0.063) Therefore *Hypothesis 3a: cognitive and affective trust positively moderates the relationship between task-oriented follower behavior and follower effectiveness*, is rejected.

In model 3 an analysis was conducted to see if cognitive and affective trust moderate the relationship between relation-oriented behavior and follower effectiveness. The ß-value suggests that there is a positive relationship (0.34). The significance however is too high (0.215) and therefore also *Hypothesis 3b: Cognitive and affective trust moderates the relationship between relation-oriented follower behavior and follower effectiveness* is rejected.

## 5.  DISCUSSION

### 5.1  Trust and Follower Effectiveness

The trustworthiness of the leaders was measured along the two dimensions of McAllister (1995), the extent of cognition-based trust and the extent of affect-based trust. The results of the research indicate that there is a positive relationship between cognitive trust and follower effectiveness and between affective trust and follower effectiveness. This is in line with the literature about this subject.

A positive relationship was found between cognitive trust and follower effectiveness. This relationship was expected because if followers are confident that their leader has the right expertise and professionalism, it might increase their own task performance.

When the level of affective trust is a high, the follower can have the feeling of psychological safety (Edmondson, 1999) and it maybe improves job satisfaction. This can lead to positive behaviors as knowledge/idea sharing, interaction and participation (Brosche et al., 2010; Parayitam and Dooley, 2009; Swift & Hwang, 2013). This can lead to increased follower effectiveness.

McAllister (1995) argued that some level of cognition-trust is necessary before people form the kinds of emotional attachments with a co-worker that affect-based trust represents. He therefore suggested that cognition-based trust, positively influences affective trust. When a high level of cognitive trust is created, the level of affective trust is probably also higher. It could be that in this research cognitive trust has positively influenced the relationship between affective trust and follower effectiveness.

### 5.2  Behavior and Follower Effectiveness

The task- and relation oriented behaviors of the followers were measured with the use of a detailed pre-set behavioral observation scheme (Gupta et al., 2009; Hoogeboom et al. 2009; Van der Weide, 2007). Both task-oriented behavior and relation-oriented behavior were positively related to follower effectiveness but the relationship between task-oriented behavior and follower effectiveness was not significant.

The relationship between relation-oriented behavior and follower effectiveness was positive (ß =0.44) and significant. This relationship was expected, because when followers show the relation-oriented oriented behaviors (supporting, developing, recognizing and empowering), it is likely that he/she feels valued in the organization, can improve his/her skills, is more involved in the organization and has a high job satisfaction. (Yukl, 2012) These kinds of behaviors can lead to higher effectiveness of the follower.

The relation between task-oriented behavior and follower effectiveness however, was positive but very small and not significant (significance=0.140). An relationship was expected because the use of clarifying, planning, monitoring operations and problem solving could lead to clear, specific goal setting, good scheduling of activities, identification of problems and opportunities and solving problems (Yukl, 2012). These aspects could lead to higher follower effectiveness. That no relationship was found could be due to the fact that maybe the emotional and relational aspects are more important for higher follower effectiveness than the cognitive and task-oriented aspects. For example Carsten et al. (2010) showed that passive followers were most busy with the task-oriented aspects of their job. They were mostly following orders and taking minimum responsibility. Pro-active followers on the other hand showed behaviors as taking initiative and offering feedback and advice to leaders. These followers could be considered more effective because they are motivated to go the extra mile (Colquitt et al., 2012; Konovsky & Pugh, 1994).

Another possible explanation that no strong relationship (or a moderate relationship) was found can be due to the use of the mean percentages of frequency of task-oriented and relation-oriented behavior. The use of frequencies are common in behavioral studies, but maybe the frequency that a follower displays task-oriented behavior or relation-oriented behavior does not say everything about the total time the follower displays a certain behavior.

## 5.3 Trust as Moderator

This study found no evidence for a moderating effect of cognitive and affective trust on the relationship between task/relation-oriented behavior and follower effectiveness.

On basis of the literature a relationship was expected because followers may feel comfortable engaging in task-oriented behavior because they believe that leaders have integrity, are dependable and reliable (Cognitive trust) (Mayer et al., 1995; Poon, 2006). Because it was expected that cognitive trust would positively influence affective trust, also a moderating effect of affective trust was expected.

A moderating effect of trust on relation-oriented behavior was expected on basis of the literature, because when followers signal the strong personal ties with their leader, they are probably more willing to help coworkers and show follower citizenship behavior. (Poon, 2006; Farh, Podsakoff, & Organ, 1999)

That no relationship was found could be due to the fact that no direct relationship was found between task-oriented behavior and follower effectiveness. This could also explain why no moderating effects were found. Further, all other variables had a direct influence on follower effectiveness. This also explains why no moderating effects were found.

## 5.4 Practical Implications

This study shows that cognitive trust, affective trust, and relation-oriented behavior could have a positive impact on follower effectiveness.

Leaders can increase these levels of cognitive and affective trust in several ways. To increase the level of cognitive trust, leaders have to be trustworthy and have to approach their job with professionalism and dedication (McAllister, 1995). To increase the level of affective trust, leaders can help followers to develop themselves independent of the organization's cornerstone agendas. When they show support for the well being of the followers as individuals, affective trust can be build. (Schaubroek et al., 2011) So it is important that a follower can share his/her ideas, feelings and thoughts with the leader and can talk freely about work-related problems. It is also important that the leader will respond constructive and with consideration on problems of the follower.

Further it is also important that leaders stimulate relation-oriented behavior of followers. They can for example, give rewards and positive feedback when a follower shows citizenship behavior or helping behavior.

This way a high level of cognitive and affective trust and relation-oriented behavior could be established, which could lead to higher follower effectiveness. This is important for the leader because it can lead to more effective followers, but also for the organization because effective followers could be viewed as a necessary condition for organizational success (Agho, 2009). This study also adds knowledge into the limited existing research into followership theory.

## 5.5 Strengths, Limitations and Future Research Directions

The purpose of this study was to advance research on followership theory (Uhl-Bien et al., 2013) by measuring follower effectiveness and the link to trust in the leader and behavior of followers. Therefore a unique method of data collection was used. Leaders and followers were videotaped during staff meetings and had to fill in a survey. This survey measured, among others, the level of trust of the followers in the leader. Video-observation in combination with surveys can be more objective than when only surveys are used. When using self reporting questionnaires there is a chance that respondents do not answer the questions honestly because they cannot remember how they behaved (memory bias) or they wish to present themselves in a socially acceptable manner (social desirability bias) (Fisher, 1993)

Despite this strong combination of video-observation and surveys, this study also has some limitations.

The first limitation is the generalizability of the study. This research was conducted in a Dutch large public sector organization. In Hofstede (1991) Dutch organizations are mostly described as feminine. In feminine organizations social contact and resolving problems by using negotiation and compromises are seen as important values. Maybe in these organizations there is more emphasis on affective trust and relation-oriented behaviors. Therefore the results cannot simply be generalized to other organizations in other countries with another culture.

Further, it is difficult to generalize the results to other industries, because this study was conducted in a public sector organization. Further research in other industries and other cultures are needed to see if the effects of trust and behavior on follower effectiveness are the same. Because the Dutch culture has many similarities with other western countries, the effects could be the same.

The second limitation is that only the percentages of the frequencies of the task-oriented and relation-oriented behaviors are used. Maybe this explains why not all expected

relationships were found. In order to get a better picture of the total task-oriented and relation-oriented behaviors also the percentages of the duration of the behaviors can be used.

Another limitation is the cross-sectional design of this study. For all teams only one meeting was recorded and analyzed. This could influence the results. In future research a longitudinal design could be used to see if there are developments over time.

This study uses the moderators' cognitive trust and affective trust. But it could be that other variables moderate the relationship between task-oriented/ relation-oriented behavior and follower effectiveness. Within and between teams are big differences in age, education level etc. this could have had effects on the results of this study.

This research could also be applied for the leader. Maybe if a leader shows more task-oriented behaviors and relation-oriented behaviors this would lead to increased leader effectiveness. So future research has to focus on repeating this study in other cultures and industries, using duration of task-oriented and relation-oriented behaviors, using a longitudinal design and other moderators and applying this study on leader behaviors.

## 6. CONCLUSIONS

This study was conducted to advance research on followership theory and to see if trust and behavior had effects on follower effectiveness. There was a positive relationship found between cognitive trust and follower effectiveness, between affective trust and follower effectiveness and between relation-oriented behavior and follower effectiveness. It turned out that when followers have a high level of cognitive or affective trust in de leader this would lead to higher follower effectiveness. Also, when a follower shows more relation-oriented behavior this would increase his/her effectiveness. There were no relationships found between task-oriented behavior and follower effectiveness and no moderating effects of cognitive and affective trust. The findings of this research are important because effective followers could be viewed as a necessary condition for organizational success (Agho, 2009). Therefore it is useful to study which aspects could lead to higher follower effectiveness.

The uniqueness of study is that it uses data of video-observations and questionnaires. This multi-method approach can lead to more reliable results.

Further research could be conducted to see if the results of this study can be generalized across multiple cultures and industries, to see if other moderators influence the relationships, if there are developments over time and to see if also duration of behaviors have an effect on follower effectiveness.

## 7. ACKNOWLEDGEMENTS

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**APPENDIX**

**Appendix 1: Test of Normality ( Shapiro- Wilk test)**

| Column1 | Statistic | Df | Sig. |
| --- | --- | --- | --- |
| Aggregated Affective trust | .97 | 28 | .612 |
| Aggregated Follower effectiveness | .97 | 28 | .611 |
| Aggregated Cognitive trust (Log) | .90 | 28 | .012 |
| Aggregated Task-oriented behavior | .98 | 28 | .879 |
| Aggregated Relation-oriented behavior | .93 | 28 | .066 |