Training and coaching of transformational leadership

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Abstract

In the field of organizational psychology, leadership is one of the most discussed topics. Only with a well functioning and effective leadership, can an organization be successful and competitive. It significantly contributes to the success and benefit of an organization as well as the well being of the employees (Yukl, 2002).

Although several approaches to transformational leadership training already exist, empirical research evaluating the effectiveness of these trainings is rare. In the presented work, Peer-based Team Coaching was combined with training to enhance participants’ transformational leadership in two different samples (service sector and educational sector) with an overall sample of 78 leaders. The experimental design compromised a pre- and post-test measuring with a 360° feedback questionnaire. In addition to the independent variable transformational leadership, the dependent variables value congruence, proactivity and commitment were measured.

Results, based on effect sizes and analysis of variance showed a positive effect of the training and coaching of transformational leadership in all samples: The leaders taking part in the training had a significant increase in their skills of transformational leadership. Furthermore, a positive effect of value congruence and proactivity was found. Due to the training and coaching of transformational leadership, a leader’s rise in value congruence and proactivity can be stated. The postulated high effect of normative and affective commitment could not be confirmed.

Implications of these results for practice and future research on leadership are discussed. The combination of training and coaching of transformational leadership is an effective human resource development tool and this positive evaluation indicates its account for practice. More research on training and coaching of transformational leadership with an improved design and larger samples needs to be conducted.
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1. Introduction

1.1 Leadership, leadership training and coaching

Leadership is one of the most discussed topics in the field of organizational psychology. Only with a well functioning and effective leadership, can an organization be successful and competitive. It plays a significant role in the success of an organization and in the well being of the employees (Yukl, 2002).

The terms “leadership training”, “leadership development” or “management training” have been used interchangeably in both scientific (Yukl, 2002) and practitioner literature (Noe & Colquitt, 2002). All of them serve the purpose of supporting individuals to perform effectively in managerial roles (Baldwin & Padgett, 1993). The importance of training in organizations has increased over the past decades. Rapid changes in the environment of organizations such as the global economy, the increasing pace of technological development and fierce competitions have produced new challenges for leaders (Kahn, 1990). Offering effective leadership trainings that help leaders to enhance their skills and adapt to changing environments (both external and internal conditions) is an important business acumen for training professionals.

The term “coaching” embraces at least as many concepts and approaches as the term “leadership training” (Kampa-Kokesch & Anderson, 2001; Rauen, 2003). Coaching was regarded as a development oriented leadership style in the 1970s, whereas leaders were considered as coaches for their employees in the 1980s (Thomas, 1998). Thereafter, coaching gained an increasing acceptance and was used in different settings of leadership development. Nowadays, it can be divided into team and individual coaching (Lippmann, 2005).

In general, training programs are designed to address the needs of a group while coaching sessions address the needs of individuals (Graham, Wedman & Garvin-Kester, 1994). There are many other forms of coaching in addition to managerial coaching, for
example, in educational settings such as schools or in the field of sports (Hudson, Miller, Salzberg & Morgan, 1994). In conclusion, coaching is an important intervention in organizations that improves the performance of individuals or teams. Seeing the advantages of leadership training and coaching, the combination of those two successful types of human resources development seems auspicious.
1.2 Practical relevance

High-level personnel and employees must continuously adapt to changes in ever-shorter cycles and both individual and collective knowledge change permanently (Sonntag, 2002). It is without any doubt that leadership training and coaching are important parts of human resource development. From medium-sized businesses to international companies (profit or non-profit), almost all offer a human resource development program addressing leaders and leadership skills. In contrast to this big range of offers, there is very little research concerning the evaluation of leadership training and coaching. It is unclear, if the money invested in these programs is thoughtfully invested. We are facing huge sums in the field of high-level personnel and leadership development. Not only the costs for the training itself (training program, external training companies, trainer) but also the costs for the non-productive time (concerning the day-to-day business) of the leaders need to be taken into account.

In the last 15 years, transformational leadership has not only attracted attention in the research field but also in the practical field (Yukl, 2002). It is noticeable, however, that only a few scientific efforts are published to evaluate the training of transformational leadership. The existing approaches are described in chapter 2.1.3. It is beyond doubt that transformational leadership is an effective way of leading (e.g., Lowe et al., 1996). This work tries to fill the gap in evaluating a training of transformational leadership and analyzes its correlates (proactivity, value congruence and commitment). A positively evaluated training is a good negotiation basis when practitioners in the field of human resource development have to legitimate high costs for leadership training and coaching.
1.3 Significance of the research

Empirical research evaluating the effectiveness of transformational trainings is rare. The existing research indicates a need for further examination of this topic: Some of the trainings only considered communication of charismatic leadership (Frese, Beimel, & Schoenborn, 2003) or the number of leaders was simply too small (Barling, Weber, & Kelloway 1996). Yet, only a few studies have examined the role of transformational leadership in German organizations. Also, there are no publications known to the author dealing with the examination of training transformational leadership in Europe.

Another important goal of this work is to find out why transformational leadership is a successful way of leading. What are important correlates of transformational leadership and will they change with the development of transformational leadership due to its training and coaching? Value congruence and proactivity are two concepts conceptually connected to transformational leadership, which have not been explored together. Commitment has already been looked at in the field of transformational leadership (e.g., Felfe & Goihl, 2002) but like value congruence and proactivity, commitment has not been determined in combination with the training and coaching of transformational leadership.

This thesis explores training and coaching of leadership in different organizational settings with different samples, using a pre-and post-test control group design.
1.4 Research questions

This dissertation investigates four main research questions. First, the developed training and coaching of transformational leadership is evaluated. Will participants of this training have greater levels of transformational leadership after they have attended this action of human resource development? Can training of transformational leadership also be successful in Germany?

Second, the correlation between proactivity and transformational leadership is examined. Does an increased transformationality of the leader correlate with the leader’s proactivity?

Third, the correlation between value congruence and transformational leadership is investigated. Is there a correlation between the followers’ evaluated value congruence between them and their leaders and the leader’s transformationality?

Fourth, the correlation between commitment and transformational leadership is observed. Will the training of transformational leadership have an effect on the leader’s commitment towards the organization and his or her job?
2. Review of literature

The following part conveys the theoretical basics of this work to the reader. It starts with an overview of the existing leadership research. The main theories and research directions are presented and this part ends with a detailed description of transformational leadership and its elements.

Then, a summary of different approaches to leadership training is given, followed by the presentation of the existing studies on training of transformational leadership. After this, coaching as a leadership development tool is introduced and team coaching and the Peer-based Team Coaching are discussed. The leadership part is concluded by the approximation to the combination of leadership training and coaching.

Finally, the three possible correlates of transformational leadership are described: Value congruence, proactivity and commitment. The theoretical framework to each of the three concepts is presented, followed by each concept’s connection to transformational leadership.
2.1 Leadership

To lead people, walk beside them.
As for the best leaders, the people do not notice their existence.
The next best, the people honor and praise.
The next, the people fear;
and the next, the people hate.
When the best leader's work is done the people say:
"We did it ourselves!"

The Chinese philosopher Lao-Tse (Yukl, 2002, p. 67)

2.1.1 Overview of leadership research

As important as leadership research in the field of organizational psychology may be, as divergent the results are (Rodler & Kirchler, 2002). The significance of the topic leadership is beyond all questions: There is nearly no work without leadership and every working person has had the experience of being led or leading.

Research has generated many definitions of leadership. Yukl (2002) aptly sums up different definitions: “… most definitions share the assumption that it [leadership] involves a social influence process whereby intentional influence is exerted by one person over other people in an attempt to structure the activities and relationships in a group or organization ” (Yukl, 2002, p. 12). In this definition, the organizational field is strongly emphasized. Von Rosenstiel et al. (1989) note that leadership can be viewed from an interdisciplinary angle. In addition to the psychological point of view, leadership is also a topic for biology, sociology, politics, law and philosophy. Therefore, the following contemplation of leadership in organizations is only one section. Von Rosenstiel et al. (1989) describe leadership in organizations from a three level view. The first level is the leadership of the whole system and its underlying business objectives. The second level consists of leadership substitutes (Weinert, 1998), indicating an indirect leadership. The work is structured well enough to guide the worker and tell him/her what to do. Hence,
leadership as a direct influence on people is not required. For example, imagine an assembly line worker, knowing exactly what to do and even having emergency plans in case of a line interruption. The third level is the most important and shall now be focused on. It deals with leadership of single individuals in organizations.

There are many approaches to categorizing leadership and research has put forth many models. The following sums up the most important and latest approaches.

**Trait theories of leadership**

This approach is based on the assumption that a person has special characteristics, making him or her a successful leader. Knowing these characteristics, it is possible to predict whether an applicant is adequate for a certain executive position or not. An attempted was made to discover those personal traits, skills, and characteristics that distinguish leaders from non-leaders, or effective leaders from ineffective leaders. Examples of these characteristics are self-efficacy and individuality. The most salient trait is intelligence (Matthews et al., 2003). The major problem with this approach is the missing or low consistency between good leaders and their attributes. Also critical is the fact that it is still unclear whether these traits and factors represent a cause or effect of being in a leadership position (or both).

**Behavioral approaches**

The relevant question is how a successful and effective leader behaves in a group. Descriptions of the leaders’ work were tried to sample with the help of questionnaires, interviews and diaries. In contrast to the trait approach, the focus shifted from how effective leaders should be to what they should do. In addition to this, there was effort to differentiate between effective and ineffective leadership behavior. The research on effective leadership has been dominated by the influence of the early research carried out at Ohio State University (Fleishman, 1953). Factor analysis of the data responses (questionnaires) indicated that subordinates perceive their supervisor’s behavior primarily in terms of two broadly defined categories, one concerned with task objectives (Initiation of structure) and the other concerned with interpersonal relations (Consideration).
With initiation of structure, the leader defines and structures his or her own role and the roles of subordinates towards attainment of the group’s formal goals. With consideration, the leader acts in a friendly and supportive manner and shows concern for the subordinates. He is strongly interested in their welfare and looks out for them. Consideration and initiating structure were found to be relatively independent behavior categories. This means that some leaders are rated high on initiating structure but low on consideration or vice versa. Most leaders probably fall along a continuum between the extreme high and low scores (Fleishman, 1953). Furthermore, it could be shown that high scores on both dimensions are related to a higher satisfaction and higher performance of the subordinates (Tschelin, 1973). It should be noted that the postulated independence of both dimensions is questionable.

Power and influence

The “power and influence” approach focuses on the leader-member exchange (Graen & Uhl-Bien, 1995). It describes the quality of the dyadic leader-led relationship. Empirical research has determined that this relationship predicts important organizational outcomes such as job satisfaction and performance (Gerstner & Day, 1997). The concept of power is very useful for understanding how one person in an organization is able to influence another person in an organization (Mintzberg, 1983). “Power involves the capacity of one party (the “agent”) to influence another party (the “target”)” (Yukl, 2002, p. 142). There has been a lot of research on different types of power. They were all based on the power taxonomy proposed by French and Raven (1959). Research on the use of different forms of power by leaders suggests that effective leaders rely more on personal power than on position power.

Research has begun to examine specific types of behavior used to exercise influence. Yukl and Tracy (1992) have identified 11 proactive influence tactics that are relevant for influencing subordinates, peers, and superiors in organizations (e.g. rational persuasion, exchange, pressure, inspirational appeals). Some of these tactics are generally more effective than others. Power and influence behavior are interrelated in complex ways but they can be regarded as separate constructs.
Contingency theories of leadership / Situational approach

The last 25 years of leadership research has been dominated by contingency theories. They posit that the effectiveness of the leadership style depends on the situation the leader is in. A very common example of a contingency theory is Fiedler’s Least Preferred Coworker (LPC) model (Fiedler, 1967). Fiedler’s LPC contingency model describes how the situation moderates the relationship between leadership effectiveness and a trait measure called the “least preferred co worker (LPC) score”.

Fiedler states three dimensions: (1) Leader member relation: The extent to which the leader has the support and loyalty of subordinates. Relations with subordinates are friendly and cooperative. (2) Position power: The extent to which the leader has the authority to evaluate subordinate performance and administer rewards and punishments. (3) Task structure: The extent to which there are standard operating procedures to accomplish the task, a detailed description of the finished product or service, and objective indicators of how the task is being performed.

For Fiedler, the most important dimension is the leader member relation. To operationalize it, he developed the least preferred co worker (LPC) instrument. The LPC score is determined by asking the leader to think of all past and present co-workers, select the one with whom the leader could work least well with, and rate this person on a set of bipolar adjective scales. The LPC score is the sum of the ratings on these bipolar scales. A leader who is generally critical in rating the least preferred co-worker will obtain a low LPC score, whereas a leader who is generally lenient will obtain a high LPC score. Refer to Rodler and Kirchler (2002) for a detailed description of this model and the measures.

Current approaches to leadership research

The latest approaches to leadership, including transformational leadership which is used in this research, can be summed up by the generic term change oriented leadership. This term includes the concepts of transformational and transactional leadership, charismatic leadership and visionary leadership. In the next part, the focus will mainly be on the model of transformational and transactional leadership.

The initial point was the rising interest in the emotional and symbolic aspects of leadership. It helped to understand how leaders influence followers to make self-
sacrifices and put the needs of the organization above the materialistic self-interests. What exactly does charisma mean? Having a look at the existing literature of charisma and charismatic leadership, a lot of models are based on the definition of charisma from Max Weber. According to Weber (1972), a charismatic leader arises in times of social crisis.

A potential leader emerges with a radical vision that offers a solution to the crisis. Followers believe in the leader’s vision and, consequently, become attracted to the leader. Therefore, the leader experiences success that makes the vision appear attainable and the followers finally perceive the leader as extraordinary. Charisma in leaders refers to special powers that leaders have, which allow them to undertake great feats that appealed to followers. Weber (1963) believed that followers of a charismatic leader willingly place their destiny in their leader’s hands and support the leader’s mission that may have arisen out of “enthusiasm, or of despair and hope” (p.49). Recent research by Conger and Kanungo (1998) applied some of Weber’s ideas to today’s organizations and developed a new version of this theory in order to describe charismatic leadership in organizations. According to them, a charismatic leader has a vision of a realistic and attractive goal which includes a better future. The leader communicates this vision and has a strong belief in it. Conger and Kanungo (1988) proposed a theory of charismatic leadership based on the assumption that charisma is an attributional phenomenon. According to the theory, follower attribution of charismatic qualities to a leader is jointly determined by the leader’s behavior, skill, and aspects of the situation. For a detailed and compact description see Yukl (2002).

Like in charismatic leadership, transformational leadership relies on the formulation and articulation of a vision. However, over the last 25 years, theory of transformational leadership has expanded and contrasted with transactional leadership (Bass, 1985). While transactional leaders rely on a straightforward clearly defined exchange relationship (i.e., contingent reward), transformational leaders utilize several behaviors that motivate followers to perform beyond expectations. Transformational leadership is one component of the Full Range Leadership Theory (FRLT) developed by Bass and Avolio (1994).
“Give the worker a chance to work with pride.” (Deming, 1982, p. 43)

The Full Range Leadership Theory (FRLT) from Bass and Avolio (1994) is one of the latest leadership theories. In sum, the FRLT consists of three categories of leadership styles: transformational leadership, transactional leadership and laissez-faire or nonleadership. They are displayed in nine factors. The last of the three types, the laissez faire leadership states the missing of transactions and the absence of leadership. The remaining seven factors will be extensively examined from the two types of transformational and transactional leadership. For a quick overview of the different leadership styles see figure 2.

Bass and Avolio (1994) describe transformational and transactional leadership in terms of two broad categories of behavior, each with specific subcategories. Transactional leadership is defined by the exchange between leaders and their subordinates: A shown subordinate performance is rewarded by the leader. Transformational leaders in addition have the ability to elevate the needs of the follower in line with their own goals and objectives (Bass, 1985). The transactional leader only concentrates on maintaining the status quo by satisfying the follower’s momentary material and psychic needs. With transformational leadership, the followers feel trust, loyalty and respect toward the leader, and they are motivated to do more than they originally expected to do (extra strength). Figure 1 shows an overview of the two concepts underlying factors.
Bass and Avolio's model (1994) includes two types of transactional behavior. *Contingent Reward* (CR) and *Management-by-exception* (Mbe). Contingent Reward behavior stands for clarification of the work required to obtain rewards and the use of incentives for the followers.

Mbe can be divided into two parts: Management by exception passive and Management by exception active. Passive management by exceptions includes use of contingent punishments and other corrective action in response to obvious deviations from performance standards. Active management, in addition, to this, contains the active looking of the leader for mistakes and enforcing rules to avoid mistakes. Mbe as well as CR stand for a follower’s expected effort, leading to an expected work outcome (symbolized by the arrows in figure 1).

Transformational leadership has an influence on this process by having four techniques to arouse a followers extra effort, leading to a higher motivation to reach their goals. The first technique is *Idealized Influence* (II). II is behavior that arouses strong follower emotions and identification with the leader. The followers have trust in the leader and a strong belief in his or her vision and the completion of the mission. *Inspirational Motivation* (IM) includes communication of an appealing vision, using symbols...
to focus subordinate effort, and modeling appropriate behaviors (Bass & Avolio, 1994). Individualized Consideration (IC) stands for providing support, encouragement, and coaching to followers. Each follower is considered individually which leads to a diverse and just treatment of every single person. Individual needs are regarded and support is given. Intellectual Stimulation (IS) is behavior that increases follower awareness of problems and influences followers to view problems from a new perspective. They are supported to think independently and question the status quo. These leadership styles (plus the laissez faire leadership) form the basis of this research work. The feedback and the leadership training were based on these eight different leadership styles.

Transformational and transactional leadership are distinct but not mutually exclusive processes. Transformational leadership is more effective and increases follower motivation more than transactional leadership, but it is important to mention that effective leaders use a combination of both types of leadership (Yukl, 2002). Bass (1985) also states that leaders are transactional as well as transformational. Needless to say that only the laissez faire leadership (with its absence of leadership) is totally ineffective.

“Within transformational leadership, the followers feel trust, admiration, loyalty, and respect toward the leader, and they are motivated to do more than they are originally expected to do.“ (Yukl, 2002 p. 253). Many research studies have been conducted in the field of transformational leadership (Yammarino & Bass, 1990; Yammarino & Bass, 1990; Seltzer & Bass, 1990; Podsakoff, MacKenzie & Bommer, 1996). Meta-analysis provided evidence for the effectiveness and utility of transformational leadership (Judge & Piccolo, 2004; Dumdum, Lowe & Avolio, 2002). For example, it was demonstrated that transformational leadership was positively related to job performance, over and above the influence of transactional and nonleadership. While we know a great deal about the relationship between transformational leadership and outcome criteria, there has been very few investigations on the training of transformational leadership.

Bass and his colleagues developed a questionnaire to measure (described in figure 1) elements of transactional and transformational leadership (Bass & Avolio, 1997; Den Hartog, Van Muijen & Koopman, 1997; Antonakis, Avolio & Sivasubramaniam, 2003). This standard instrument to assess transactional and transformational leadership was also used in this research. It will be described in the methods part of this work (3.3.1.).
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<td>Laissez faire</td>
<td>Indicates the absence of leadership, or the avoidance of intervention.</td>
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<tr>
<td>Management by Exception – Passive (TA)</td>
<td>Maintains the status quo. Generally, the modes of reinforcement are correction, criticism, negative feedback, and negative contingent reinforcement, rather than the positive reinforcement used with Constructive Transactional leadership.</td>
</tr>
<tr>
<td>Management by Exception – Active (TA)</td>
<td>Generally associated with an active monitoring for mistakes that arise or could arise.</td>
</tr>
<tr>
<td>Contingent Reward (TA)</td>
<td>Involves a leader-led interaction that emphasizes an exchange of what is expected by the leader for what is desired by the follower. May also involve a clarification of roles and responsibilities.</td>
</tr>
<tr>
<td>Idealized Influence (TF)</td>
<td>The leader is viewed as a respected role model, is authentic, trustworthy and highly credible.</td>
</tr>
<tr>
<td>Inspirational Motivation (TF)</td>
<td>An inspirationally motivating leader provides meaning and simplifies complex ideas and problems.</td>
</tr>
<tr>
<td>Intellectual Stimulation (TF)</td>
<td>Encourages followers to question their old way of doing things, work procedures and procedures or to break with the past.</td>
</tr>
<tr>
<td>Individualized Consideration (TF)</td>
<td>Followers are treated differently but equitably on a one-to-one basis. Emphasis is on developing people to higher levels of potential.</td>
</tr>
</tbody>
</table>

Figure 2: Definitions of transformational (TF) and transactional (TA) leadership styles
2.1.2 Leadership training: A summary of different approaches

Leadership training can be viewed from different perspectives. First, the attention is turned to different target groups of leadership training. Next, elements of effective trainings are reviewed. Third, the main theories of leadership and their respective approaches to leadership training are summarized.

Target Group

Most leadership trainings are designed in order to improve skills of lower- and middle-level managers (Rothwell & Kazanas, 1994). In contrast, other trainings are aimed at the qualification of participants for a higher position (Von Rosenstiel, Nerdinger, Spieß & Stengel, 1989). Some leadership trainings have been especially designed for women (Domsch & Regnet, 1990). In sum, the variety of managerial trainings has increased over the last twenty years.

Elements of effective training

Due to many different leadership approaches, a huge amount of methods and designs of leadership trainings have been established (Noe & Colquitt, 2002). Yukl (2002) demonstrated some factors that support the learning process in successful training programs. These will be presented in the following:

First, before starting the training, participants should have clear learning objectives. They should be informed about the purpose of the training and the expectations concerning behavior, skills and knowledge. Optimally, this information is provided by supervisors.

Second, the training content should be clear and meaningful. On the one hand, it should build on participants’ prior knowledge. The under- or overestimation of trainees’ knowledge leads to less effective learning results. On the other hand, the training content should focus only on important issues and should be well structured. Illustrating summaries and learning goals during the training adds to its effectiveness.

Third, a well designed sequence of training contents is at least as important as the content itself. Prior to practical exercises, the underlying theoretical concepts of these exercises should be introduced. Complex material should be separated into subunits in
order to maintain the interest of the participants. Repeated practice as well as rest breaks help to avoid fatigue during the training sessions.

Fourth, the appliance of different training methods instead of only one method (e.g. lecturing) arouses interest in the trainees and thus helps them to focus on the content. As a result, the use of several methods ensures a higher level of learning transfer - provided that the methods are appropriate for the respective training conditions and settings. For example, a brainstorming exercise in a heterogeneous class would be inappropriate if some participants were too shy to open up to the group.

Fifth, one rule of thumb says that an opportunity for active practice should always be given. Theoretical knowledge should be complemented by practical implementation, because new information will be processed deeper if practical exercises are accomplished. If special skills are trained or behavior is practiced under training circumstances it is more likely that the new information will be implemented in job situations.

Sixth, feedback to training participants also represents an important part of effective training. In different situations, feedback from different sources should be implemented. First, the trainer should reflect the participant's performance and suggest improvements. Second, the other participants should comment on the respective behavior. Additionally, the possibility of self-criticism should be given. These different sources of feedback are included into ‘360 degree feedback’, which can be considered as very effective (Luthans & Peterson, 2003).

Finally, the transfer of the training content back to the workplace describes the most important part of a training program. The main goal of an effective training should be the remembrance of the learned information and the implementation of the training content in real life working situations. Follow-up activities such as post-training meetings in smaller groups support a successful transfer as well as a training diary with clear, timed instructions.

Different leadership theories and their elements of trainings

In part 2.1.1 an overview of leadership research was given. Based on this classification, in this part the most common leadership training approaches will be presented.

Yukl and Van Fleet (1992) summarized five different leadership trainings that were based on their own respective leadership theory. The classification of these theories
follows the above presented five main approaches to leadership: the “traits and skills”, the “behavioral”, the “power and influence”, the “situational” and the “transformational and charismatic” approach (cf. Yukl, 2002).

The “traits and skills” approach tries to explain leadership behavior as a function of constructs like intelligence or personality traits. In addition, motives are also taken into account (e.g., self-regulation). Thus, trainings based on these theories aim at improving personality traits that are related to managerial effectiveness.

The behavioral approach analyses how executives deal with their tasks at work. The “work-activity-research” (Luthans, Hodgetts & Rosenkrantz, 1988) tries to identify managerial competencies that are critical to success. Behavioral trainings like the training of interpersonal competencies (e.g. communication), time management, team development and performance appraisal are typical examples of this approach.

The “power and influence” approach focuses on the leader-member exchange (Graen & Uhl-Bien, 1995). It examines leader effectiveness in terms of the source and amount of power, and the way in which leaders exercise their power over followers. Power here is a person’s potential to influence others. To fully understand the influence process between leaders and followers, it must be recognized as reciprocal. Not only followers depend on leaders for inspiration, direction and support for their work but also leaders must rely on followers to perform well. Trainings based on the “power and influence” approach aim at improving the relationship between the leader and his/her subordinate with the help of behavioral elements.

The situational approach emphasizes the importance of contextual factors that influence leadership processes. Basic situational variables are a) work complexity (e.g. high vs. low complexity), b) type of organization (e.g. public vs. private organizations) and c) the characteristics of the followers (e.g. homogenous vs. heterogeneous skill levels).

The contingency theory of leadership (Fiedler, 1967) assumes that behaviors of the leader have to fit into the respective situation in order to be effective. Thus, a desired leadership style can only be defined as a function of situational variables. Another important leadership model of the situational approach is the normative decision model (Vroom & Yetton, 1973). It suggests that the effectiveness of a decision procedure depends on the respective situation. The quality of a decision and the decision acceptance by the subordinates is regarded as a function of the way the leader comes to a decision.
in a respective situation. Vroom and Yetton (1973) developed decision trainings in order to improve individuals’ leadership skills.

Figure 3 summarizes the four different leadership and training approaches and exposes possible training elements regarding five different common training themes: Task related expertise, cooperative and respectful leader-follower relations, decision participation, upward and lateral influence and managerial motivation (adapted from Yukl, 1981).

<table>
<thead>
<tr>
<th>Common training themes</th>
<th>Trait</th>
<th>Power and influence</th>
<th>Behavior</th>
<th>Situational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task related expertise</td>
<td>Technical and conceptual skills essential for most leaders</td>
<td>Basis for expert power and necessary for influence such as persuasion</td>
<td>Technical and conceptual skills and knowledge essential for any effective leadership behaviors and for external representation</td>
<td>Situational dependent</td>
</tr>
<tr>
<td>Cooperative and respectful leader-follower relations</td>
<td>Human relations skills (e.g. listening) are necessary for fostering good relationships</td>
<td>Referent power is an important source of influence over subordinates and followers</td>
<td>Consideration by leader important determinant of follower satisfaction; providing recognition, decision participation</td>
<td>Variables such as subordinate’s competence, maturity, performance, and level in organization important for leader-follower relations</td>
</tr>
<tr>
<td>Common training themes</td>
<td>Trait</td>
<td>Power and influence</td>
<td>Behavior</td>
<td>Situational</td>
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<tr>
<td>------------------------</td>
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</tr>
<tr>
<td>Decision participation</td>
<td>Certain leader traits predispose greater use of decision participation by followers</td>
<td>Participation increases the amount of reciprocal influence vs. leaders who make decisions autocratically</td>
<td>Leader effectiveness increased in problem-solving group meetings if leader uses appropriate procedures to overcome problems in group process</td>
<td>Decision acceptance and decision quality are key variables in determining decision participation</td>
</tr>
<tr>
<td>Upward and lateral influence</td>
<td>Upward influence enhanced by critical knowledge and expertise; technical and human relations skills important for upward and lateral influence</td>
<td>Significant upward influence to acquire necessary resources, improves leader’s influence and status with followers</td>
<td>Leaders spend a lot of time interacting with superiors and peers, especially in representational role; also coordinate and facilitate vertical communication in organization</td>
<td>Relative to degree of lateral interdependence (i.e., extent to which leader’s group must rely on other groups to work effectively)</td>
</tr>
</tbody>
</table>
2. Review of literature

### Common training themes

<table>
<thead>
<tr>
<th>Managerial motivation</th>
<th>Trait</th>
<th>Power and influence</th>
<th>Behavior</th>
<th>Situational</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High degree of managerial motivation and other traits (e.g. self-esteem) necessary to handle hectic pace and administrative functions</td>
<td>Leaders are likely to have a strong need for power and positions of influence</td>
<td>Leader’s high degree of ambition, initiative, persistence, and energy more likely to be channeled into necessary leadership behaviors (e.g., planning, organizing)</td>
<td>Function of the organization, size of group, and degree of administrative responsibility relevant (e.g., more stress and responsibility presumably requires higher levels of motivation)</td>
</tr>
</tbody>
</table>

Figure 3: Four different leadership and training approaches and possible training elements (adapted from Yukl, 1981)

The fifth approach to leadership is the transformational (Bass, 1985) or charismatic (Conger & Kanungo, 1988) theory of leadership. Some theorists treat these two types of leadership as essentially equivalent, whereas other theorists view them as distinct but overlapping approaches (Yukl, 2002; Rowold & Heinitz, 2007). The next chapter extensively deals with the training of transformational leadership.

#### 2.1.3 Training transformational leadership

Although several approaches to transformational leadership training exist, empirical research evaluating the effectiveness of these trainings is rare. Figure 4 lists and summarizes the empirical studies that have been conducted.
<table>
<thead>
<tr>
<th>Evaluation study</th>
<th>Sample and training methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frese, Beimel, &amp; Schoenborn (2003): Action training for charismatic leadership:</td>
<td>Sample: 47 midlevel managers</td>
</tr>
<tr>
<td>Two evaluations of studies of a commercial training module on inspirational</td>
<td>Improving communication skills in managers</td>
</tr>
<tr>
<td>communication of a vision</td>
<td>Methods: two day training including role play of a speech, mental modeling, feedback</td>
</tr>
<tr>
<td>Dvir, Eden, Avolio, &amp; Shamir (2002): Impact of transformational leadership on</td>
<td>Sample: 320 Israel army leaders</td>
</tr>
<tr>
<td>follower development and performance: A field experiment</td>
<td>Methods: three day leadership training</td>
</tr>
<tr>
<td></td>
<td>including goal setting, role play, group discussions, simulations, presentations, video cases and peer and trainer feedback</td>
</tr>
<tr>
<td>training on attitudinal and financial outcome</td>
<td>Methods: one day group-based training program including, goal setting, role play plus individual booster sessions</td>
</tr>
<tr>
<td>Towler (2003) Effects of charismatic influence training on attitudes, behavior,</td>
<td>Sample: 48 business school students</td>
</tr>
<tr>
<td>and performance</td>
<td>Methods: 2.5 hrs training including behavioral modeling, role play with feedback and instruction on charismatic communication styles</td>
</tr>
</tbody>
</table>

Figure 4: Transformational and charismatic leadership training evaluation studies

These empirical studies provided evidence for the notion that training in transformational and charismatic leadership yields enhanced leadership skills or behaviors and, ultimately, enhance levels of performance. However, given the complexity of the training process and the variety of potential training methods and potential groups of trainees, more research is needed. Experiments in different cultures and with various samples need to be conducted.

Most of the background for this research was taken from the training of Barling et al. (1996). They also used a pre-test/post-test control-group design ($N = 20$) to assess the effects of transformational leadership training. Nine and 11 bank managers were ran-
domly assigned to training and control groups. Three different variables were collected: Subordinates’ perception of their branch managers’ transformational leadership, subordinates’ own organizational commitment, and two indices of branch-level financial performance. The Multifactor Leadership Questionnaire (MLQ 5X-short) was used to assess the leadership styles. There were two different aspects involved in the training program. A one-day group-based training session was held for all branch managers in the experimental group, which was followed by a series of four individual booster sessions. The purpose of the one-day training session was to familiarize participants with the central concepts of transformational leadership and to discuss and role-play how transformational leadership might be implemented in the work context. In the booster sessions after the training, goals were set to reinforce transformational leadership behavior. Multivariate analyses of covariance showed that the training resulted in significant effects on subordinates’ perception of leaders’ transformational leadership, subordinates’ own organizational commitment and two aspects of branch-level financial performance. The subordinates of managers receiving training perceived their managers as higher on intellectual stimulation, charisma and individual consideration than of managers in the no-training control group. Main criticism of the study was the small sample group. There is also a lack of discussion, why the booster sessions are important for the training’s effectiveness. This work tries to identify the prominence of additional training sessions by adding a coaching day and showing first effort of evaluating team coaching effect.

Bruce Avolio (1999) also greatly contributed to this research. He is one of the most active researchers in the field of transformational leadership and utilized the above described Full Range Leadership Theory for the development of leadership training. This training is well documented (Bass & Avolio, 2005) and has been applied in many organizations worldwide for more than twenty years (Avolio, 1999).

Prior to the, in this research applied training, trainees participate in an internet-based 360° feedback which resulted in a detailed description of their individual leadership behaviors strengths and weaknesses. Within the training, training elements like role play, peer feedback, goal setting and behavior modelling were utilized to overcome trainees’ individual weaknesses. For a detailed description of the, in this research used training see chapter 3.2.2.
Given the strong relationship between transformational leadership and performance, empirical studies that evaluate leadership training as described by Bass and Avolio (2005) in different cultural contexts seem desirable. Companies are becoming more and more multinational and huge organizations have spent large amounts of money for training of leaders.

However, a necessary precondition to these non-north American studies is the translation of training manuals and materials. In order to meet scientific standards of evaluation, our efforts yielded a German translation of both manual and materials such as the 360° feedback system. Full Range Leadership Training was offered to organizations and evaluated. Moreover, in order to further enhance the effect of these trainings, these trainings were combined with team coaching. Before a description of the specific coaching method is given, an introduction to coaching methods in leadership development is provided.

2.1.4 Coaching as a leadership development tool

Lippmann (2005) distinguishes between team and individual coaching. At first, individual coaching will be described before team coaching is focused on.

Leaders who receive coaching are often on a higher organizational level. The last 15 years have seen a rapid increase in the popularity of the method of coaching (Hall, Seibert & Hollenbeck, 1999). Typical for most forms of coaching is the one-on-one setting of the coaching intervention. The coach is typically an external agent who helps individual leaders with their specific, work-related problem. However, one recent trend is that also issues such as work-life balance are the content of organizational coaching interventions. In contrast to training interventions, the content of the individual coaching sessions is typically not fixed until the first session. The main purpose of such an individual “executive coaching” (Hall et al., 1999) is to communicate certain skills or to give advice concerning special situations or problems. Also, the coach comments and discusses behavior with the coachee. Of course, strict confidentiality is a necessary precondition to each coaching. The length of a coaching period varies from several days to a few years. Leadership as an important part of organizational behavior often is a coaching topic.
What are the advantages of executive coaching in comparison to formal trainings? The major advantage of coaching is the individual attention: The one-to-one relationship between coach and coachee allows for intense work and for a detailed assessment of the coachee’s individual situation (Hillmann, Schwandt & Bartz, 1990). In contrast, in a formal training one trainer has to divide his/her attention in order to teach - or provide help to - several persons. Within an individual coaching, the coach can easily adapt his/her method and by doing so, meets the needs and individual concerns of the participant. Additionally, high confidentiality allows for deep-level problem analysis and solving (Laske, 1999; Kilburg, 2001). The main disadvantage of coaching interventions is obvious: Individual coaching is always combined with very high expenses.

2.1.5 Team Coaching

As a way to overcome the financial disadvantage of individual coaching, team coaching was developed. Team coaching can be defined as “direct interaction with a team intended to help members make coordinated and task-appropriate use of their collective resources in accomplishing the team’s work” (Hackmann & Wageman, 2005). Hackmann & Wageman (2005) identified four different approaches of team coaching.

First, within eclectic interventions, activities and methods are utilized that derive from no particular theoretical perspective but have considerable face validity. A coach tries to help a team to perform better - which is comparable with the work of a management consultant. These models are often found in practitioner literature (e.g., Fischer, 1993).

Second, the concept of process consultations was developed by Schein (1969). According to his theory, interpersonal relationships are essential for effective task performance. Only if the members of the group analyze and improve these relationships, will they have the chance of performing well. The consultant engages team members in analyzing group processes on two levels: (1) the substantive level – to analyze how human processes are affecting work on a specific problem of the organization (2) the internal level – to better understand the interaction in the team. This type of group coaching has a strong clinical orientation.

Third, within behavioral models of team coaching, feedback and support are the main tasks for the coach who encourages the team to learn new and effective team be-
havior. For example, Komaki (1998) proposed operant conditioning to modify the team behavior. The team should learn more effective team behaviors, e.g. giving and receiving feedback.

Finally, within developmental coaching, the timing of coaching is the most important factor. Only at certain group development stages interventions are regarded as useful. There are times in the life cycles of groups when they are more and less open to intervention. Because teams are unlikely to be able to process intensive interventions when task demands are also high, coaching sessions are reserved for periods of relatively low cognitive demands. For example, team building is fostered in times when several new members have joined a team.

2.1.6 The Peer-based Team Coaching

In contrast to the four approaches mentioned above, the Peer-based Team Coaching (PTC) involves a coach who does not offer final solutions to the team, but rather moderates the team coaching and helps the team members to find solutions on their own. Team members are viewed as experts and are encouraged to use the potential of the group to find solutions. Each team member is coached by the respective other team members. This process is guided and moderated by an experienced PTC-coach. Within the coaching process, each team member’s role (e.g., writing protocol, coach) is clearly defined. Individual themes for personal development are developed by the group. Each member of the coaching group receives a developmental theme, which is formulated positively and future orientated (e.g., “I will write my own script for my journey into the future”). Each coaching session lasts between 1 and 1 ½ hours. Afterwards, the leader applies the developmental theme in his/her daily work routines. In future PTCs, the leader will reflect on his development and receive additional help from team members. This concept ensures sustainability, fosters leaders’ long-term development and supports the transfer of new insights and skills into the work context (Olivero, Bane & Kopelman, 1997).

In contrast to other coaching methods, empirical research has been conducted that supports the effectiveness of the PTC. In a sample of middle-level executives in a Swiss company, PTC helped coachees to achieve their work-related goals (Rowold, 2008).
Moreover, coachees’ performance improved continually within the study temporal frame of 18 months. For a detailed description of the PTC, please go to chapter 3.2.3.

2.1.7 Combination of transformational leadership training and coaching

In this section, the efforts of combining transformational leadership training with Peer-based Team Coaching will be described. In general, the idea is to provide leaders first with the transformational training, where leaders learn about their strengths and weaknesses, and where first steps for improvement are taken. Second, after the training, trainees meet in groups of round about six. In these groups, the method of Peer-based Team Coaching is implemented to develop participants’ strengths and to further reduce individual weaknesses that have been identified by the 360° feedback prior to the training intervention. For example, if one leader has potential for enhancing his/her Intellectual Stimulation (cf. Figure 1), he/she can choose to focus on the respective leadership behaviors in the coaching.

In sum, the combination of leadership training and coaching includes several elements or methods that have been identified as effective leadership development methods (Van der Sluis-den Dikken & Hoeksema, 2001; Woodall, 2005): 360° feedback (Van Velsor, Leslie & Fleenor, 2001), peer feedback (Luthans & Peterson, 2003), role play (Prideux & Ford, 1987), behavior modeling (Robertson, 1990), goal setting (Locke & Latham, 2002), coaching or “booster” sessions (Smither, London, Flautt, Vargas & Kucine, 2002).

Leadership training often is a short-term intervention with little long-term effect. Team coaching, in contrast is a long-term intervention and an important impulse to further topic related leadership development. The combination of these methods has great potential for a long-term human resource activity.

In prior research, the isolated effect of each of these methods has been evaluated. In contrast, the combined effect of these methods has not yet been evaluated. It is the author’s hope that the described combination yields advancements within the field of leadership development.
2.1.8 Hypothesis

The training and coaching was designed to enhance the participants’ characteristics in transformational leadership. A well known problem in training research is the fact that due to small sample sizes the pre- and post training difference is often not statistically significant (e.g. measured by repeated measurement analysis of variance). It is, therefore, suggested (e.g., Arthur et al., 2003) that the effectiveness of trainings be compared by their effect size (Cohen’s $d$).

An increase of transformational leadership is expected, which will be shown by positive effect sizes. On the contrary, negative effect sizes would indicate a decline in transformational leadership. After the training, a leader of the experimental group shows a more transformational oriented leadership style than before the training in comparison to the leaders of the control group. According to this, hypothesis 1 is postulated as follows:

Hypothesis 1: The effect sizes of transformational leadership (Cohen’s $d$) of the experimental group are distinctly larger than the effect sizes of transformational leadership of the control group/waiting list control group.
2.2 Value congruence

2.2.1 Value congruence: Theoretical framework

There are great numbers of definitions of values. Rokeach is cited often (1973, p. 5) and he defines values as “an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence.” Hofstede (1984, p. 18) defines values as “a broad tendency to prefer certain states of affairs over others.” A more elaborate definition, given by Schwartz (1994, p. 21), is that values are “desirable transsituational goals, varying in importance, that serve as guiding principles in the life of a person or other social entity”.

Over the years, a great deal of research has been devoted to the study of values and values in relation to work. Schwartz value model (1999) has received most of the attention. The theory of basic human values has two core components. First, it specifies 10 motivationally distinct types of values that are postulated to be recognized by members of most societies and to encompass the different types of values that guide them. Second, the theory specifies how these 10 types of values (e.g. power, stimulation, universalism, tradition, security) relate to one another. It specifies which values are compatible and mutually supportive, and which are opposed and likely to conflict with one another.

2.2.2 Value congruence and transformational leadership

A transformational leader has certain values and tries to communicate these values and pass them over to his/her followers (Bass, 1995). On the one hand, a leader stands for his or her values and has a strong interest in living them. On the other hand, values arise from a certain vision of a leader. This, especially, is shown in the transformational behavior of Idealized Influence that arouses strong follower emotions and identification with the leader. The followers have trust in the leader and a strong belief in his or her vision and the completion of the mission. The transformational leader’s value system is a role model for his or her followers (House & Mitchell, 1974). It is suggested that one of the main reasons transformational leaders increase followers’ motivation to perform beyond their initial expectations is that their followers come to accept and internalize the values articulated by their leader (Shamir et al., 1993). Shamir and colleagues also
argue that the influence of a leader’s vision is especially powerful when it is congruent with followers’ personal values. In contrast, transactional leaders do not actively engage their followers’ values and they do not attempt to realign followers’ values according to their personal ones. According to Bass (1985), transactional leaders motivate followers based on their immediate personal needs. As long as a transactional leader clarifies the role and task performance for followers, they are expected to proceed in completing their tasks if they believe that rewards are contingent on performance.

A number of organizational researchers have investigated the topic of shared values between followers and leaders. A positive relationship between the level of congruence and performance at various levels in organizations has been reported. Chatman (1991) stated that value congruence between employees and organizational culture had a positive relationship with level of employee commitment. Meglino & Ravlin (1989) explained the positive effect of value congruence on individual outcomes. Individuals with similar personal values have a smoother communication.

The relationship of leaders-follower value system and transformational leadership has, however, not been adequately explored. Burns (1978) considered transformational leadership to be a relationship wherein leaders and followers raise one another to higher levels of motivation. Their purposes, which might have started out as separate but related, become fused, leading to greater leader-follower congruence in values. Thus, value system congruence between leader and follower could be among the most important characteristics of transformational leadership (Krishnan, 2005).

Previous research has supported the positive role that value congruence and trust play in the leadership process. For example, Meglino & Ravlin (1989) reported that workers were more satisfied and committed when their personal values were congruent with the values of their supervisors. Kirkpatrick and Locke (1996) conducted a laboratory experiment demonstrating that leaders who articulated visions with more of an emphasis on quality, positively affected followers' perceived congruence with beliefs and values communicated in the vision.

2.2.3 Hypotheses

A connection between transformational leadership and value congruence is postulated. Transformational leaders share their values with their team. The more transformational
a leader is, the stronger the value sharing is supposed to be. A rise in value congruence is expected. Leaders taking part in the training and coaching of transformational leadership are expected to have a more transformational leadership style and higher value congruence with their employees than leaders not taking part in the training and coaching of transformational leadership.

Hypothesis 2a: The effect sizes of value congruence (Cohen’s d) of the experimental group are distinctly larger than the effect sizes of value congruence of the control group/waiting list control group.

To test, whether pre-training value congruence has an impact on the training of transformational leadership, hypothesis 2b is postulated.

Hypothesis 2b: Value congruence has an impact on transformational leadership. Leaders in the experimental group with high pre-training value congruence have a larger increase in transformational leadership than the overall experimental group increase in transformational leadership.

Sharing values is an important factor of transformational leadership. A correlation of value congruence and transformational leadership is expected.

Hypothesis 2c: There is a positive correlation between transformational leadership and value congruence.
2.3 Proactivity

2.3.1 Proactivity: Theoretical framework

“There are three types of people in the world: those who make things happen, those who watch things happen, and those who wonder what happened.”

(Mary Kay Ash, 1995, p. 151).

Research results concerning proactivity have been heterogeneous. There are many existing views and definitions but what they all have in common is that proactivity is becoming a more and more important component of job performance. For example, as new forms of management are introduced that minimize the surveillance function, companies will increasingly rely on employees’ proactive behavior to identify and solve problems (Frese et al., 1997). Work becomes more and more dynamic and decentralised and proactive behavior becomes a more critical determinant of organizational success. Crant (2000, p. 6) defines proactivity as follows: “I define proactive behavior as taking initiative in improving current circumstances or creating new ones; it involves challenging the status quo rather than passively adapting to present conditions. “Employees take an active role in their approach toward work and they initiate situations and create favourable conditions. A contrast to this is a more passive, reactive pattern of behavior. They actively seek information and opportunities for improving things and they do not passively wait for information and opportunities to come to them (Crant, 2000).

Frese and Fay (2001) named the same concept personal initiative. According to Frese (2001, p. 2), “personal initiative is a work behavior defined as self-starting and proactive that overcomes barriers to achieve a goal.” Personal initiative can be defined as a behavior syndrome that results in an individual taking an active and self-starting approach to work goals and tasks and persisting in overcoming barriers and setbacks (cf. Frese et al., 1997). Frese (2001) also sees that the proactive individual changes the environment in contrast to a non proactive person reacting to environmental demands. The person anticipates future demands and prepares for them. For example, a manager sets goals for the future year and takes into account what problems may arise to achieve
these goals. The better his or her preparation is the better he or she can cope with the upcoming difficulties.

2.3.2 Proactivity and transformational leadership

Taking a closer look at the concept of proactivity there are clear parallels between it and transformational leadership. A proactive person, who demonstrates a strong drive to make a difference, enjoys turning problems into opportunities and initiates change. This behavior can clearly be found in transformational leaders showing a strong occurrence in intellectual stimulation and inspirational motivation.

Transformational leadership describes persons exhibiting a strong propensity to establish challenging goals and a vigorous drive to reach goals (e.g., Yukl, 2002). As Frese (2001) describes, goal setting is also an important factor in the behavior of proactive persons.

Crant and Bateman (2000) analyzed the relation between proactivity and charismatic leadership behavior. In a sample of 156 leader/follower dyads, followers’ scores on proactivity were significantly associated with their leaders’ ratings of the extent to which they displayed charismatic leadership. Another study of the relationship between proactive behavior and charismatic leadership assessed the relationship between American presidential proactivity, charismatic leadership, and presidential performance (Deluga, 1998). They also found a positive correlation between the presidential charismatic leadership and their proactive behavior. Based on this research and on the fact that there are no known published results dealing with the coherence between transformational leadership and proactivity, this work tries to analyze this relationship.

2.3.3 Hypotheses

A proactive person enjoys turning problems into opportunities and initiates change. This behavior can clearly be found in transformational leaders showing a strong occurrence in intellectual stimulation and inspirational motivation. A leader improving his or her transformational leadership in the training and coaching of transformational leadership should become more proactive. Leaders not taking part in the training and coaching of transformational leadership are not expected to show advanced transformational leadership skills and proactivity.
Hypothesis 3a: *The effect sizes of proactivity (Cohen’s d) of the experimental group are distinctly larger than the effect sizes of proactivity of the control group/waiting list control group.*

To test whether pre-training proactivity has an impact on the training of transformational leadership, hypothesis 3b is postulated.

Hypothesis 3b: *Proactivity has an impact on transformational leadership. Leaders in the experimental group with high pre-training proactivity have a larger increase in transformational leadership than the overall experimental group increase in transformational leadership.*

Proactivity is an important factor of transformational leadership. A correlation of proactivity and transformational leadership is expected.

Hypothesis 3c: *There is a positive correlation between transformational leadership and proactivity.*
2.4 Commitment

2.4.1 Commitment: Theoretical framework

According to Oliver (1990, p. 30), commitment can bee seen as “one’s inclination to act in a given way toward a particular commitment target”. Brickman (1987, p. 2), in addition, states that commitment is “a force that stabilizes individual behavior under circumstances where the individual would otherwise be tempted to change that behavior”. What most of the definitions have in common is that commitment is described as a stabilizing and obliging force that gives direction to behavior and binds a person to a course of action. This research focuses on the organizational commitment. Organizational commitment is “a bond or linking of the individual to the organization” (Mathieu & Zajac, 1990, p. 171). It may be generally defined as a strong belief in and acceptance of organizational goals and values, a willingness to exert effort on behalf of the organization, and a desire to maintain a member of the organization (Porter et al., 1974).

Most of the current research on organizational commitment is based on the understanding of it as a multidimensional construct. Meyer et al. (1991) proposed a three-component model, including: affective commitment, continuance commitment and normative commitment. Affective commitment denotes an emotional attachment to, identification with, and involvement in the organization: It is the emotional linkage between an employee and the organization. Employees with a high degree of affective commitment stay in the organization because they want to. Continuance commitment denotes the perceived costs associated with leaving the organization. Employees with a high degree of continuance commitment stay in the organization because there are good reasons for them to do so (for example, missing or low alternatives or made investments and pay offs). Normative commitment denotes the perceived obligation to remain in the organization. Highly normatively committed employees feel an obligation to stay because of norms and values being shared. They also may be influenced by important people telling them to stay in the organization. They even reject better alternatives, as they would feel guilty, leaving the organization. Meyer et al. (1991) advise that the three components should not be seen as mutually exclusive but as components that can variously coexist.
Organizational commitment is one of the most often researched variables in the area of organizational behavior since it is assumed to influence just about any employee behavior that is of benefit to the organization, including performance, attendance, and retention (Riketta, 2002). Organizational commitment serves as an important predictor for several outcome variables. More satisfaction is shown from employees high in organizational commitment and they articulate less turnover intentions and show lower rates in absenteeism (e.g., Meyer et al., 1993).

In a meta-analytic study, Matthieu and Zajac (1990) identified the following antecedents to organizational commitment: personal characteristics, role states, job characteristics and group-leader relations.

### 2.4.2 Commitment and transformational leadership

There has been some published research on the correlation between transformational leadership and organizational commitment (e.g., Felfe, 2002; Felfe et al., 2004). For example, Meyer et al. (2002) found a significant correlation between affective commitment and transformational leadership \( r = .46 \). For this research, it is of great interest, how the training of transformational leadership has an influence on the leaders’ commitment. There are several reasons why a change in commitment may occur. A transformational leader is expected to show his or her values and regards emotional needs. This may, on the one hand, enhance the followers’ commitment toward the organization. On the other hand, a transformational leader is a model for the employees and should have a stronger commitment towards the organization than a less transformational leader. Showing emotions and values and addressing them to his or her followers, the affective part of commitment should be directed. A transformational leader should also be strong in normative commitment. He or she has an idealized influence on the followers and should be able to manipulate them to stay in the organization. A transformational leader is in charge of a team enjoying working with their leader. This should have a strong influence on their commitment and vice versa on their leader’s commitment towards the organization. This research tries to identify the correlation between the degree of leader’s tranformationality and his or her organizational commitment.
2.4.3 Hypotheses

A transformational leader should have a great affective commitment towards the job and the organization. He or she is a role model for the employees and embodies the goals, values and interests of the organization and the job. The training and coaching of transformational leadership should enlarge leader’s affective commitment. Clear norms and goals are important for being transformational. The normative commitment of the leaders should be high as well. Leaders not raising their transformational leadership are not expected to increase their normative and affective commitment.

Hypothesis 4a: The effect sizes of affective and normative commitment (Cohen’s d) of the experimental group are distinctly larger than the effect sizes of affective and normative commitment of the control group/waiting list control group.

To test the coherence between transformational leadership and affective and normative commitment, hypothesis 4b is postulated.

Hypothesis 4b: There is a positive correlation between transformational leadership and affective and normative commitment.
3. METHODS

This part sums up the methods used in this research. First, the three different samples are described. Then, the procedure is characterized starting with the pre-training preparations including the translation, adaptation of the training and the acquisition of participants. This is followed by the description of the training of transformational leadership and the Peer-based Team Coaching. The procedure part closes with a summary of the survey design. The last part of this chapter is a detailed account of the measures of the independent variable (transformational leadership) and the dependent variables (commitment, proactivity and value congruence).
3. Methods

3.1 Samples: Overview

Three different samples are the groundwork of this research. A small sample of industrial managers \((N = 7)\) took part in the Peer-based Team Coaching and participated in the 360° MLQ-Feedback (sample 1). A second sample of service sector team leaders \((N = 19)\) with a waiting control group attended the training and coaching of transformational leadership (sample 2). The largest sample of leaders in the educational sector \((N = 59)\) with a real and a waiting control group also participated in the training and coaching of transformational leadership (sample 3). Due to reasons of personal privacy, variables like the participant’s age and leadership experience were not surveyed. Unfortunately, a randomized assignment (in all samples) to experimental group and control group was not possible. The next part describes the samples in extenso.

3.1.1 Sample 1: Industrial management sector

Participants of this sample were German industrial managers (middle management). Seven leaders took part in the Peer-based Team Coaching (six men and one woman). Four weeks prior to the coaching, the participants were given a paper pencil version of the MLQ (self-rating) and several paper pencil versions of the MLQ (peer-rating) to complete the 360° MLQ-Feedback. The Peer-based Team Coaching was accomplished with work related topics in the field of transformational leadership. The leaders were not given the results of the feedback until the second and last measuring time (the same 360° MLQ-Feedback as before the coaching, three months after the coaching). There was no control group and no dependent variables were measured.

3.1.2 Sample 2: Service sector

The service sector participants of this sample were team leaders and managers of a big movie theatre chain in Germany. The theatre leaders are in charge of the management of the whole movie theatre. This involves human resources planning, employee selection, daily business and the management of special events (e.g., film festivals). The team leaders lead groups of up to 12 employees. There are team leaders for different work fields in the movie theatre. Typical work fields are: cash desk, purchase and attendance. There were two theatre leaders (both male) and 17 team leaders (eight male and nine
female) in the sample. A waiting control group design was implemented. 10 leaders took part twice in the 360° MLQ-Feedback prior to the training, with a time gap of three months. The other nine leaders only took part once in the 360° MLQ-Feedback. All leaders participated in the two-day training and coaching of transformational leadership. Three months after the training, another 360° MLQ-Feedback survey was given. At all times of measurement in the survey, the paper-pencil questionnaires of the dependent variables (proactivity, commitment and value congruence) were filled in.

3.1.3 Sample 3: Educational sector

Participants of this sample were leaders in the educational sector ($N = 59$). There were six head teachers of a medium size German comprehensive school (one female and five male). They lead groups of up to 25 school teachers and are contacts for all students, parents and teaching related questions of the teachers. There were 53 university employees (graduate research assistants and university professors) of a medium-size German university (21 women and 32 men). 10 leaders (five women and five men) were in the control group and 43 in the experimental group (16 women and 27 men). The head teachers took part in a waiting control group design. The main tasks of the university employees are to teach university students, carry out research projects, administer and advise their employees and research groups. All participants took part in the 360° MLQ-Feedback (four weeks prior to the training and three months after the intervention) and additionally filled in the questionnaires for the dependent variables (at all times of measurement). The participants of the control group did not attend the training and coaching of transformational leadership. They were not given any feedback of their leadership results until the second time of measurement. The head teachers with the waiting control group design took part twice in the 360° MLQ-Feedback before the training (with a time gap of three months).
3.2 Procedure

3.2.1 Pre-training preparations: Translation, adaptation and acquisition

Due to the fact that there was no existing German training for transformational leadership, it was the author’s duty to create one. The basis for the training was the Full Range Leadership Training (FRLT) (Bass & Avolio, 1999). This one to two day training uses different, positively evaluated elements to enhance the participants’ transformational leadership. As a preparation for this training, the FRLT was translated into German (training manual and training material) and is now available for the German training market (Bass & Avolio, 2005). The main element of the training is a 360° feedback prior to the training intervention. Transformational and charismatic leadership is sometimes regarded with skepticism and considered an overemphasized North American phenomenon that cannot be easily transferred (Felfe et al. 2004). Knowing the difficulty of a one to one content and method transfer, the training was adapted to the German/European cultural habits. In addition to this, elements of the, in chapter 2.1.3 described and evaluated trainings to transformational leadership were included (e.g., Barling et al., 1996). These were elements such as goal setting and peer feedback. For a detailed description of this work’s training, see chapter 3.2.2.

After the adaptation and creation of the training material, a crucial part of this research work was the acquisition of leaders willing to participate in the training program. The author had to engage in the acquisition process (contacting companies, trying to reach the decision-maker of the company, convincing them to implement the training in their human resource development plan, financial negotiations, selection of the participants, scheduling of the trainings, et cetera). The whole process of acquisition took over a year and was completely underestimated in the time plan of the research.

3.2.2 Training of transformational leadership

The training of transformational leadership is an adaptation of the Full Range Leadership Training (Bass & Avolio, 1999; Bass & Avolio, 2005). This two-day training consists of a training part (first day) and a coaching part (second day). The coaching part
with the Peer-based Team Coaching will be elaborately described in the next part (3.2.3).

The main part of the training is an internet-based 360° feedback which results in a detailed description of the participants’ individual leadership behaviors strengths and weaknesses. The Multifactor Leadership Questionnaire (MLQ) was used to assess the different leadership styles of transformational, transactional and laissez faire leadership (for detailed information, see chapter 3.3.1). This internet-based feedback system has several advantages: It is very easy and economic for the participants to reach their followers, colleagues and co-workers. After receiving an email with detailed instructions by the administrator, the participants follow the steps as described. After choosing the people, they want to be assessed by; the system automatically invites these people to take part in the leadership survey. The administrator has an insight into the questionnaires already completed and can directly address the participants. In addition to the followers, colleagues and co-workers, the training participant also assesses his or her leadership skills with the MLQ. All these data are aggregated in a 360° feedback report automatically generated by the system. The participants cannot identify a single person’s feedback. All data is aggregated for anonymity reasons. With these pre-training preparations, the participants then start the two-day training. Without the feedback assessment, a training participation is not allowed.

Course of action and elements of the training

The training starts with an address of welcome and an introduction of the trainer and the participants. In addition to this, the participants’ expectations and experiences with leadership training are asked and compared with the actual contents. The first exercise is a worksheet to deal with their leadership challenges. This is followed by an exercise in which participants generate characteristics of an ideal and less ideal leader, respectively. These characteristics are collected for further use. After that, the Full Range Leadership Model is presented. The different leadership styles of transformational, transactional and laissez-faire leadership are circumstantially presented, discussed, and examples are given and generated. The characteristics of the “ideal leader” exercise are used and assigned to the leadership styles. After having had an insight into the leadership styles and a detailed concept of transformational leadership, the participants are
given their individual feedback reports. First, they are introduced to the design and contents of the report. Second, and more detailed, the trainer gives an individual coaching based on the content and results of the feedback. The main parts of the feedback were the results of the transformational and transactional scales, the comparison between the self-assessment and the peer assessment and a strength/weaknesses-profile of the leader.

Having fully understood the results of the feedback, the participants then start with their leadership development plan. It is their individual task to improve in two different leadership styles and choose a style with great potential (low rates in the feedback results) and a style with already great results (high rates in the feedback). By choosing a weakness as well as strength, the leaders not only improve in areas with a poor performance but also try to maintain or even improve their strengths and become even more of an expert in a certain field. Goals are set under the consideration of certain specific rules. The goals (everyday leadership behavior, which should be changed) should be as specific, measurable, attractive, realistic and terminable as possible. The participants make a strong commitment to the set goals. To strengthen this commitment, the participants group in dyads and introduce one another to the goals they have set. The opponent has the chance to understand, question and discuss the others leadership goals. This is a second important step in the change of leadership behavior and a very good preparation for the Peer-based Team Coaching. Obvious questions and concerns can be discussed and a first feedback to the leadership development plan is given. The first training day is completed by participants’ and trainers’ reflections of the day and a creative way of summing up the participants’ leadership situations: The leaders paint their situation (using pictures, being abstract, etc.) on a screen. This painting is part of the first phase in the Peer-based Team Coaching, which is presented in the next chapter.

3.2.3 Coaching: The method of Peer-based Team Coaching

After a detailed introduction to transformational leadership, the results of the feedback and on the conduction of a leadership development plan, participants intensify their training on transformational leadership on the second training day, the group coaching.

The Peer-based Team Coaching (PTC) is a team coaching method which has its roots in both the practical field and theory area. Experienced practitioners like consultants and
3. Methods

theorists (university professors) developed this method (Rowold & Schley, 1998). It is
the objective of this approach to use the provided resources of all participants as well as
possible. Common problems should be solved and problem-solving strategies should be
extracted from it. The participant’s exchange is guided and structured by an experienced
coach. The coach does not offer final solutions to the team, but moderates the team
coaching and helps the team members to find solutions on their own.

Each coaching group (depending on the total amount of training participants) con-
ists of approximately six participants. Each participant is coached by the respective
other participants. The duration of one coaching session is one hour. The original length
is 90 minutes, but was shortened due to the lack of time on the second day.

One important instrument of the PTC is the adoption of other perspectives. Every
participant brings his or her experiences into the group and benefits from the experi-
ences of the other coaching members. The daily routine work often does not leave
enough space for such exchanges. The PTC gives a structured, moderated frame work
for such transposition. The immediate result of this process is the solution of a work
related problem. An important factor is that sustainable change processes occur. Due to
the common problem solving, more than a one-time solution results: Systematic and
basic problem solving strategies and competencies are shown and gained (Kauffeld,
2005). The coachee, presenting his or her situation is given the chance of leaving his or
her own perception, seeing problems and facts from another angle and participating in
the experiences, impressions and interpretations of the coaches. The clear and structured
strategies help the participants to find systematic ways of using and practising realistic
problem solving approaches (Rowold & Rowold, 2008). Not only for the coachee
him/herself, but also the coaches’ experience that they are able to support others in work
related problems. In addition to this, the PTC enhances communication, in general, and
supports a new communication structure.

Course of the Peer-based Team Coaching

Coaching sessions of the PTC always follow the same structure. During the course of
the day, every participant has the possibility of presenting his or her case/leadership
development plan. Coaching sessions last 60 minutes and involve the following 5 steps
(cf. Rowold & Rowold, 2008):

Course of the Peer-based Team Coaching

Coaching sessions of the PTC always follow the same structure. During the course of
the day, every participant has the possibility of presenting his or her case/leadership
development plan. Coaching sessions last 60 minutes and involve the following 5 steps
(cf. Rowold & Rowold, 2008):
1. Information and orientation (15 minutes)
The coachee presents his or her development plan by showing and describing the picture he or she has painted. The other participants (coaches) listen attentively, make notes and pose questions for a better understanding.

2. Conference of the coaches (20 minutes)
In this phase, the coachee has the passive role of just listening. The coaches exchange their impressions, connotations, perceptions and feelings concerning the presented case. One participant neutrally gathers this information.

3. The key topic (10 minutes)
After the successful build-up of the coaches’ impressions, they together extract a key topic from the gathered information. It should be short, concise and striking. It should mirror the development plan, the problems, the challenge and the development potential of the coach. Requirements of a good key topic are:

- goal-oriented and practicable
- challenging and active
- motivating and pronounced
- not phrased as a conjunctive

4. Search for development hints (10 minutes)
With the help of the just identified key topic, the coaches brainstorm and search for concrete development possibilities and solutions. Without any evaluation, the gathered opportunities are handed over to the coachee. From now on, the coachee faces the problem and its solutions.

5. Process reflection (5 minutes)
The coaches and the coachee have the possibility of giving feedback regarding group dynamic processes. The coachee also gives feedback, whether the produced solutions (in his or her opinion) are helpful or not.
Effectiveness of the PTC
Empirical research has been conducted that supports the effectiveness of the PTC. Rowold (2008) showed in a sample of middle-level executives in a Swiss company that PTC helped coachees to achieve their work-related goals.

Other research by Rowold and Rowold (2008) with 26 participants from different work areas (e.g., medical sector, educational sector) also showed a rise in participants’ work effectiveness. Research dealing with the evaluation of coaching is rare and the presented results are one important step towards a better understanding of the nature of coaching. The author’s effort is also an evaluation of the PTC, in combination with the training of transformational leadership.

3.2.4 Survey design
Design
The survey has a quasi-experimental pre- and post-test design. Five weeks before the training, the participants took part in the 360° feedback. They were given two weeks to assess their own leadership styles and invite their employees, co-workers and supervisors to join them. In addition to this web-based survey, the leaders filled in the commitment questionnaire and the proactivity questionnaire. The employees, co-workers and supervisors of the participants were asked to fill in the value congruence questionnaire.

Three months after the training, the participants were once more invited to take part in the 360° feedback with the same procedure as pre-training, including the paper-pencil questions of commitment, proactivity and value congruence.

Control group
The survey has a control group design. In the educational-sample, there was a real control group: The experimental group took part in the training and coaching of transformational leadership. The control group did not take part in the training and coaching of transformational leadership and was not given any intervention. The results of the 360° feedback were not given to the participants of the control group until the second time of measuring.
In the service sector-sample, there was a waiting control group: All participants of this design attended the training and coaching of transformational leadership. Some of these leaders took part in the 360° feedback and the paper-pencil questionnaires twice before the training (waiting control group). The first survey started four months prior to the training. The second survey started four weeks before the training. The leaders of the waiting control group were not given the results of the feedback until the training.
3.3 Measures

3.3.1 Operationalization of the independent variable transformational leadership

The Multifactor Leadership Questionnaire (Bass, 1985) is deemed to be the standard instrument for the measurement of transformational leadership. It has five transformational scales, three transactional scales and the laissez faire scale. For a detailed description and definition of the scales, please see chapter 2.1.1. All MLQ scales are operationalized by four questions. A bipolar answer-scale from “I do not agree” (1) to “I totally agree” (5) was used. For the 360° feedback, the MLQ was used in a self-assessment and a peer-assessment version. The overall scale of transformational leadership is generated by the average determination of the single scales. The nine-dimensional factor structure was confirmed by the work of Antonakis, Avolio and Sivasubramaniam (2003). This grand sample (\(N > 6,500\)) referred to the Anglo-American area and the English version of the questionnaire. An insufficient validity of past German translations of the questionnaire could be eliminated by a recently published translation by Rowold (2003). For this re-translation, a nine dimensional factor structure could be found (c.f. Rowold & Grabbe, 2004).

Psychometric properties

Confirmatory factor analysis could support the nine dimensional factor structure of the German translation of the MLQ (Rowold & Grabbe, 2004). With a sample of 267 public administration employees (Radstaak, 2005) the existing factor structure also could be confirmed. The reliability of the questionnaire (Cronbach’s alpha) can be considered as satisfying. The reliabilities of all nine MLQ scales were between .68 and .85 (Radstaak, 2005; Rowold, 2005).

3.3.2 Operationalization of the dependent variable value congruence

To assess value congruence, a short version of Posner’s questionnaire for the measurement of value congruence between employees and their superior (1992) was used. The advantage of the short version is its economic length. It consists of six questions and a
five-point Likert-response scale is provided for each question, with the following anchors: “strongly agree” (5), “agree” (4), “neither agree/disagree” (3), “disagree” (2), and “strongly disagree” (1). The overall value congruence score is generated by the average determination of the single questions.

Psychonomic properties
Posner (1992) generated psychonomic properties from one large sample of employees of a large multinational manufacturing company with a total of 1,634 people. An adequate internal reliability was reported (Cronbach's alpha = .89).

3.3.3 Operationalization of the dependent variable proactivity
To measure proactivity, the Questionnaire of Personal Initiative: Self-reported initiative (Frese et al., 1997) was used in this research. This economic measure consists of seven questions and a five point answer scale is used: "not true at all" (1) to "very true" (5). The overall proactivity score is generated by the average determination of the single questions.

Psychonomic properties
Frese et al. (1997) generated psychonomic properties from two different samples. The first sample was a group of 403 Dutch university students. The reliability can be considered as good (Cronbach’s alpha = .80). A German sample (working population) within the age of 20-68 years (N = 450) also showed good results (Cronbach's alpha = .85 -.88). Frese and Fay (2001) reviewed studies based on 11 samples on the construct of personal initiative and found good construct validity.

3.3.4 Operationalization of the dependent variable commitment
To assess the organizational commitment, Felfe’s (2002) Questionnaire for the acquisition of affective, calculative and normative commitment was used in this research. The questionnaire assesses organizational commitment and commitment towards the job with three different parts: affective, calculative and normative commitment. Organizational commitment is represented by 14 items (affective: five items; calculative: four
items; normative: five items). Commitment towards the job is represented by 16 items (affective: seven items; calculative: five items; normative: four items). A bipolar answer-scale from “I do not agree” (1) to “I totally agree” (5) was used.

Psychometric properties

The questionnaire was used in different settings with different organizations and companies. The sample contains 580 employees with an average age of 36.5 years. Both exploratory and confirmatory factor analytic studies supported initial findings that the three commitment measures loading on separate factors and that the measures are distinguishable from each another (Felfe et al., 2002).

Reliability for each scale was found to be between .74 and .91. Therefore, Felfe et al. (2002) suggest that each of the psychological states identified as commitment to the organization can be reliably measured.
3.4 Data Analysis

According to Arthur et al. (2003), the effect size is the common metric for the evaluation of training effectiveness. Cohen’s $d$ is used in this research to measure differences between groups (c.f. Holling & Schulze, 2004). Cohen’s $d$ is defined as the difference between two means divided by the pooled standard deviation for those means. Cohen (1992) describes $d$'s of .20, .50 and .80 as small, medium and large effect sizes, respectively.

Guidelines for the analysis of effect sizes in the field of training can be found in a meta-analysis of design and evaluation features for the effectiveness of training in organizations in Arthur et al. (2003). The results of the meta-analysis (395 trainings were taken into account) revealed a medium training $d$ of .62.

To test all postulated hypothesis, effect sizes (Cohen’s $d$) were applied. Due to small sample sizes in the field of training research, multivariate analyses of variance often are not significant (Holling, 1998). Nevertheless, analyses of variance were used additionally (two factor ANOVA with repeated measurement, inner subject factor: time; between factor: group). Only significant results are presented in this work. For all analyses of variance results, see appendix E. To assess further coherences, Pearson product-moment correlations were conducted.
4. Results

Results of three different samples are presented. Descriptive statistics are followed by results concerning the hypotheses. Effect sizes, analyses of variance results and correlations are presented. First, the results of the small management sample are shown. Second, the results of the service sector sample are referred to. Third, the largest sample’s results from the educational sector are reported on.
4. Results

4.1 Study 1: Peer-based Team Coaching in management

4.1.1 Descriptive variables

Descriptive statistics for all measured variables at pre-coaching and post-coaching are presented in table 1. A small rise in transformational and transactional leadership can be reported after the training.

Table 1: Descriptive statistics of transformational leadership before and after the coaching for the intervention group (management sample)

<table>
<thead>
<tr>
<th>Variable</th>
<th>before training</th>
<th>after training</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intervention</td>
<td>Intervention</td>
</tr>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>transformational leadership</td>
<td>3.70</td>
<td>.38</td>
</tr>
<tr>
<td>transactional leadership</td>
<td>3.26</td>
<td>.42</td>
</tr>
</tbody>
</table>

*Note:*

$N = 7$ for coaching group leaders

4.1.2 Further results

Table 2 shows the effect sizes (Cohen’s $d$s) for the small manager group for transformational leadership. A small positive effect ($d = .33$) can be found (cf. Arthur et al., 2003). The Peer-based Team Coaching can be evaluated as effective. However, these positive findings are limited due to the lack of a control group and the small number of participants.

On the one hand, the results of this sample are reported to get a first impression of whether the Peer-based Team Coaching can be evaluated as effective and on the other hand, to generate first effect sizes in the field of coaching in organizations. So, it may not only be a pre-test but also an important result for future research.
Table 2: Cohen’s $d$s for dependant samples for transformational leadership of the experimental group (management sample)

<table>
<thead>
<tr>
<th>Sample</th>
<th>Transformational leadership</th>
<th>Transactional leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group</td>
<td>.33</td>
<td>.23</td>
</tr>
</tbody>
</table>
4. Results

4.2 Study 2: Service sector

4.2.1 Descriptive variables

Descriptive statistics for all measured variables at pre-training and post-training are presented in table 3. A rise from pre-training to post training for the intervention group for transformational and transactional leadership, proactivity and value congruence can be reported. Normative and calculative commitment towards the job and calculative and affective organizational commitment show a decrease from pre- to post training in the intervention group. Normative organizational commitment and affective commitment towards the job show an increase from pre- to post training in the intervention group.
### Table 3: Descriptive statistics of the dependent and independent variables before and after the training for the intervention and control groups (service sector sample)

<table>
<thead>
<tr>
<th>Variable</th>
<th>before training</th>
<th>after training</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intervention</td>
<td>Control</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Transformational Leadership</td>
<td>3.68</td>
<td>.27</td>
</tr>
<tr>
<td>Transactional Leadership</td>
<td>3.08</td>
<td>.12</td>
</tr>
<tr>
<td>Proactivity</td>
<td>3.75</td>
<td>.37</td>
</tr>
<tr>
<td>Value congruence</td>
<td>3.79</td>
<td>.41</td>
</tr>
<tr>
<td>Affective organizational</td>
<td>3.42</td>
<td>1.38</td>
</tr>
<tr>
<td>commitment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculative organizational</td>
<td>3.63</td>
<td>1.89</td>
</tr>
<tr>
<td>commitment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normative organizational</td>
<td>2.51</td>
<td>.82</td>
</tr>
<tr>
<td>commitment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affective commitment towards</td>
<td>2.83</td>
<td>.69</td>
</tr>
<tr>
<td>the job</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculative commitment towards</td>
<td>2.14</td>
<td>.62</td>
</tr>
<tr>
<td>the job</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normative commitment towards</td>
<td>2.31</td>
<td>.66</td>
</tr>
<tr>
<td>the job</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note:* 
N = 19 for training group leaders and N = 10 for control group leaders

### 4.2.2 Further results

Cohen’s $d$ for the dependent and independent variables of this sample are presented in table 4.
Table 4: Cohen’s ds for dependant samples for the dependant and independent variables of experimental and control group (service sector sample)

<table>
<thead>
<tr>
<th>Samples</th>
<th>Tf</th>
<th>Ta</th>
<th>Pro</th>
<th>Vc</th>
<th>OCa</th>
<th>OCc</th>
<th>OCn</th>
<th>JCa</th>
<th>JCc</th>
<th>JCn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group</td>
<td>.92</td>
<td>.59</td>
<td>.72</td>
<td>1.02</td>
<td>-.05</td>
<td>-.36</td>
<td>.23</td>
<td>.70</td>
<td>-.53</td>
<td>-.56</td>
</tr>
<tr>
<td>Waiting control group</td>
<td>.46</td>
<td>.33</td>
<td>-.43</td>
<td>.24</td>
<td>.10</td>
<td>-.59</td>
<td>-.01</td>
<td>-.03</td>
<td>.16</td>
<td>-.06</td>
</tr>
</tbody>
</table>

Acknowledgements: Tf = transformational leadership; Ta = transactional leadership; Pro = proactivity; Vc = value congruence; OCa = affective organizational commitment; OCc = calculative organizational commitment; OCn = normative organizational commitment; JCa = affective commitment towards the job; JCc = calculative commitment towards the job; JCn = normative commitment towards the job

Cohen’s d for the transformational leadership of the experimental group shows a high (d = .92) positive effect (cf. Arthur et al., 2003). The effect sizes of transformational leadership of the experimental group are positive. The training of transformational leadership can be evaluated as effective. Hypothesis 1 can be accepted. The transformational leadership effect size of the experimental group (d = .92) is bigger than the effect size of transformational leadership of control group (d = .46). The control group has a positive effect, too. The effect of the experimental group is larger. After the training, participants of the experimental group had greater levels of transformational leadership than participants in the control group.

Value congruence shows a high positive effect in the experimental group (d = 1.02). The effect sizes of value congruence of the experimental group are positive. Hypothesis 2a can be fully accepted. The effect of value congruence in the control group (d = .24) is distinctly smaller than the effect size of value congruence in the experimental group. After the training, participants of the experimental group had greater levels of value congruence than participants in the control group.

Proactivity shows a high positive effect in the experimental group (d = .72). Support for hypothesis 3a can be found in the negative small effect in the control group. The effects of proactivity in the control group (d = -.43) are distinctly smaller than the effect size of proactivity in the experimental group. After the training and coaching of transformational leadership, participants were more proactive than before the training.
The groups were positively tested for normal distribution and the pre-conditions for analysis of variance were given. First, group differences on the post-test scores were assessed by using analysis of variance. Proactivity and value congruence showed a significant effect over group and time, \( F(1, 23) = 6.32, p < .01; F(1, 27) = 3.56, p < .01. \)

In general, the effect of affective and normative commitment is very small. A medium/high positive effect for affective commitment towards the job (cf. Arthur et al., 2003) for the experimental group can be found \((d = .70)\). A small effect for normative organizational commitment \((d = .23)\) can be postulated. The affective organizational commitment shows no effect \((d = -.05)\). Cohen’s \(d\) for job related normative commitment even shows a negative effect \((d = -.56)\). In summary, the training only had an influence on the participants’ normative commitment. Hypothesis 4a can only be supported in affective commitment towards the job. The experimental group effect size of affective commitment towards the job \((d = .70)\) is bigger than its control group effect size \((d = -.03)\).

Table 5 shows Cohen’s \(d\)s for transformational leadership after median split the group. The effect sizes of participants with value congruence and proactivity above the median split are presented. These findings support hypothesis 2b: The effect size of transformational leadership of leaders with high pre-training value congruence \((d = 1.50)\) is higher than the overall experimental group increase in transformational leadership \((d = .92)\). A leader with high pre-training value congruence has higher post-training levels of transformational leadership than a leader with a low pre-training value congruence.
Table 5: Cohen’s $d$s for dependant samples for transformational leadership of intervention and control group after median split of value congruence and proactivity (service sector sample)

<table>
<thead>
<tr>
<th>Samples</th>
<th>Transformational leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group value congruence</td>
<td>1.50</td>
</tr>
<tr>
<td>Control group value congruence</td>
<td>.51</td>
</tr>
<tr>
<td>Experimental group proactivity</td>
<td>.92</td>
</tr>
<tr>
<td>Control group proactivity</td>
<td>.40</td>
</tr>
</tbody>
</table>

The effect size findings for proactivity support hypothesis 3b: The effect size of transformational leadership of leaders with a high pre-training proactivity ($d = .92$) is bigger than the overall experimental group increase in proactivity ($d = .72$). Pre-training proactivity had a positive impact on the training and coaching of transformational leadership.

To additionally support hypothesis 2b and 3b, group differences on the post-test scores were assessed by using analysis of variance (two factor ANOVA with repeated measurement; inner subject factor: time, between factor: group). As a potential additional impact factor, value congruence and proactivity were included as covariates. However, a significant impact for both variables as a covariate could not be found.

Table 6 shows the experimental group correlations of transformational leadership, transactional leadership, value congruence, proactivity and commitment before and after training and coaching of transformational leadership.

There are no significant correlations between transformational leadership and value congruence confirming hypothesis 2c. The hypothesis dealing with proactivity (3c) could not be confirmed, also by reason of missing significant correlations.

No support for hypothesis 4b could be found. There is no positive post- and pre-training correlation between transformational leadership and affective and normative commitment. Only one significant correlation can be reported: There is a medium significant
correlation between affective commitment towards the job and transformational leadership (pre-training) of $r = .49$. 
### Table 6: Experimental group correlations of transformational leadership, transactional leadership, value congruence, proactivity and commitment before (under the diagonal) and after training (above the diagonal) and coaching (service sector sample)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Tf1/Tf2</th>
<th>Ta1/Ta2</th>
<th>Pro1/Pro2</th>
<th>Vc1/Vc2</th>
<th>OCa1/OCa2</th>
<th>OCc1/OCc2</th>
<th>OCn1/OCn2</th>
<th>JCa1/JCa2</th>
<th>JCc1/JCc2</th>
<th>JCn1/JCn2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tf1/Tf2</td>
<td>1</td>
<td>-.49*</td>
<td>-.06</td>
<td>.21</td>
<td>.15</td>
<td>.05</td>
<td>.03</td>
<td>.08</td>
<td>-.02</td>
<td>.20</td>
</tr>
<tr>
<td>Ta1/Ta2</td>
<td>.03</td>
<td>1</td>
<td>.02</td>
<td>-.14</td>
<td>-.06</td>
<td>.01</td>
<td>-.07</td>
<td>-.05</td>
<td>-.22</td>
<td>-.38</td>
</tr>
<tr>
<td>Pro1/Pro2</td>
<td>.27</td>
<td>-.48</td>
<td>1</td>
<td>-.08</td>
<td>.41</td>
<td>-.04</td>
<td>.01</td>
<td>.59*</td>
<td>-.31</td>
<td>-.45</td>
</tr>
<tr>
<td>Vc1/Vc2</td>
<td>.03</td>
<td>.05</td>
<td>-.01</td>
<td>1</td>
<td>-.19</td>
<td>-.24</td>
<td>.25</td>
<td>-.24</td>
<td>.24</td>
<td>.19</td>
</tr>
<tr>
<td>OCa1/OCa2</td>
<td>.29</td>
<td>.07</td>
<td>.08</td>
<td>.01</td>
<td>1</td>
<td>-.16</td>
<td>-.03</td>
<td>.81**</td>
<td>-.76**</td>
<td>-.48</td>
</tr>
<tr>
<td>OCc1/OCc2</td>
<td>.07</td>
<td>-.42</td>
<td>.47</td>
<td>-.19</td>
<td>-.26</td>
<td>1</td>
<td>.15</td>
<td>-.19</td>
<td>.27</td>
<td>.29</td>
</tr>
<tr>
<td>OCn1/OCn2</td>
<td>.47</td>
<td>-.23</td>
<td>.22</td>
<td>-.01</td>
<td>-.16</td>
<td>.18</td>
<td>1</td>
<td>-.06</td>
<td>.58*</td>
<td>.57*</td>
</tr>
<tr>
<td>JCa1/JCa2</td>
<td>.49*</td>
<td>-.28</td>
<td>.32</td>
<td>-.23</td>
<td>-.03</td>
<td>.18</td>
<td>.66**</td>
<td>1</td>
<td>-.38</td>
<td>-.49*</td>
</tr>
<tr>
<td>JCc1/JCc2</td>
<td>.37</td>
<td>-.01</td>
<td>.07</td>
<td>-.38</td>
<td>-.11</td>
<td>.01</td>
<td>.72**</td>
<td>.75**</td>
<td>1</td>
<td>-.67**</td>
</tr>
<tr>
<td>JCn1/JCn2</td>
<td>.44</td>
<td>-.08</td>
<td>.41</td>
<td>.09</td>
<td>-.15</td>
<td>.01</td>
<td>.72**</td>
<td>.49**</td>
<td>.58**</td>
<td>1</td>
</tr>
</tbody>
</table>

**Acknowledgements:**
Tf = transformational leadership; Ta = transactional leadership; Pro = proactivity; Vc = value congruence; OCa = affective organizational commitment; OCc = calculative organizational commitment; OCn = normative organizational commitment; JCa = affective commitment towards the job; JCc = calculative commitment towards the job; JCn = normative commitment towards the job

Pearson-correlations
* p < .05; ** p < .01
4.3 Study 3: Educational sector

4.3.1 Descriptive variables

Descriptive statistics for all measured variables at pre-training and post-training are presented in table 7. After the training, leaders in the experimental group had greater levels of all measured variables than before the training and coaching of transformational leadership.

Table 7: Descriptive statistics of the dependent and independent variables before and after the training for the intervention and control groups (educational sector sample)

<table>
<thead>
<tr>
<th>Variable</th>
<th>before training</th>
<th>after training</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intervention</td>
<td>Control</td>
</tr>
<tr>
<td></td>
<td>$M$  $SD$</td>
<td>$M$  $SD$</td>
</tr>
<tr>
<td>Transformational Leadership</td>
<td>3.66 .37</td>
<td>3.85 .29</td>
</tr>
<tr>
<td>Transactional Leadership</td>
<td>2.92 .41</td>
<td>3.06 .25</td>
</tr>
<tr>
<td>Proactivity</td>
<td>3.84 .55</td>
<td>3.78 .56</td>
</tr>
<tr>
<td>Value congruence</td>
<td>3.68 .51</td>
<td>3.73 .43</td>
</tr>
<tr>
<td>Affective organizational commitment</td>
<td>3.81 .83</td>
<td>3.50 1.22</td>
</tr>
<tr>
<td>Calculative organizational commitment</td>
<td>2.89 .86</td>
<td>2.43 .90</td>
</tr>
<tr>
<td>Normative organizational commitment</td>
<td>2.69 .83</td>
<td>2.15 .81</td>
</tr>
<tr>
<td>Affective commitment towards the job</td>
<td>4.10 .67</td>
<td>4.17 .84</td>
</tr>
<tr>
<td>Calculative commitment towards the job</td>
<td>2.54 .89</td>
<td>2.18 .83</td>
</tr>
<tr>
<td>Normative commitment towards the job</td>
<td>2.47 .76</td>
<td>1.97 .66</td>
</tr>
</tbody>
</table>

Note: $N = 50$ for training group leaders and $N = 9$ for control group leaders
4.3.2 Further results

Cohen’s $d$ for the dependent and independent variables of this sample are presented in table 8.

**Table 8:** Cohen’s $d$ for dependent samples for the dependent and independent variables of intervention and control group (educational sector sample)

<table>
<thead>
<tr>
<th>Samples</th>
<th>Tf</th>
<th>Ta</th>
<th>Pro</th>
<th>Vc</th>
<th>OCa</th>
<th>OCc</th>
<th>Ocn</th>
<th>JCa</th>
<th>JCc</th>
<th>Jcn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group</td>
<td>.72</td>
<td>.41</td>
<td>.52</td>
<td>.51</td>
<td>.17</td>
<td>-.18</td>
<td>.07</td>
<td>.06</td>
<td>.10</td>
<td>-.08</td>
</tr>
<tr>
<td>Control group</td>
<td>-.56</td>
<td>-.10</td>
<td>-.01</td>
<td>-.26</td>
<td>-.02</td>
<td>1.01</td>
<td>.21</td>
<td>-.24</td>
<td>.28</td>
<td>.23</td>
</tr>
<tr>
<td>Waiting control group</td>
<td>1.84</td>
<td>1.83</td>
<td>-.33</td>
<td>-.28</td>
<td>-.07</td>
<td>-.45</td>
<td>.14</td>
<td>-.50</td>
<td>-.06</td>
<td>.14</td>
</tr>
</tbody>
</table>

**Acknowledgements:** Tf = transformational leadership; Ta = transactional leadership; Pro = proactiveness; Vc = value congruence; OCa = affective organizational commitment; OCc = calculative organizational commitment; Ocn = normative organizational commitment; JCa = affective commitment towards the job; JCc = calculative commitment towards the job; Jcn = normative commitment towards the job

Cohen’s $d$ for the transformational leadership of the experimental group shows a medium to high positive effect ($d = .72$). The effect sizes of transformational leadership of the experimental group are positive. Hypothesis 1 can partially be accepted. The transformational leadership effect size of the experimental group ($d = .72$) is distinctly bigger than the effect size of transformational leadership of the control group ($d = -.56$). After the training, leaders in the experimental group had greater levels of transformational leadership than participants of the control group. The control group even decreased in transformational leadership. The results of the waiting control group clearly contradict hypothesis 1: It has substantially positive effect ($d = 1.84$), meaning that there is a considerable increase in transformational leadership, without any training.

The groups were positively tested for normal distribution and the premises for analysis of variance were given. First, group differences on the post-test scores were assessed by using analysis of variance. However, only one relation attained significance: Supporting hypothesis 1, transformational leadership showed a significant effect over group and time, $F (1, 54) = 7.63, p < .001$. The training of transformational leadership can be evaluated as effective as leaders who take part in the training had significant greater levels of transformational leadership. Value congruence approached significance over
4. Results

Value congruence shows a medium positive effect in the experimental group. The effect size of value congruence of the experimental group is positive. Due to the training of transformational leadership, a leader of the experimental group had greater levels of value congruence than before the training. Hypothesis 2a can be accepted. The effects of value congruence in the control group \((d = -0.26)\) and in the waiting control group \((d = -0.28)\) are distinctly smaller than the effect size of value congruence in the experimental group.

Proactivity shows a medium positive effect in the experimental group. The effect size of proactivity of the experimental group is positive. After the training, leaders in the experimental group have greater levels of proactivity than participants of the control group. Support for hypothesis 3a can be found in the small negative effect in the control groups. The effects of proactivity in the control group \((d = -0.01)\) and in the waiting control group \((d = -0.33)\) are distinctly smaller than the effect size of proactivity in the experimental group.

However, there is only little support for hypothesis 4a: In general, the effect of affective and normative commitment is very small. Cohen’s \(d\)s for affective commitment (organizational and job-related) for the experimental group \((d = 0.17, d = 0.06)\) indicate a small effect. Cohen’s \(d\) for job related normative commitment even shows a negative effect \((d = -0.08)\). The training only had a small or no influence on the participants’ normative and job-related commitment. The experimental group effect sizes of affective commitment (organizational and towards the job) with small values \((d = 0.17; d = 0.06)\) are bigger than the negative control group effect sizes \((d = -0.02, d = -0.07; d = -0.24, d = -0.50)\).

Table 9 shows Cohen’s \(d\)s for transformational leadership after having median split the group. The effect sizes of transformational leadership of participants with value congruence and proactivity above the median split are presented. These findings do not support hypothesis 2b: The effect size of transformational leadership of leaders with high pre-
training value congruence \( (d = .50) \) is as high as the overall experimental group increase in value congruence \( (d = .51) \).

To support hypothesis 2b, group differences on the post-test scores were assessed by using analysis of variance (two factor ANOVA with repeated measurement; inner subject factor: time, between factor: group). As a potential additional impact factor, value congruence was included. A significant impact as a covariate was found, \( F (1, 53) = 7.31, p < .001 \), supporting hypothesis 2b.

**Table 9: Cohen’s \( d \)s for dependant samples for transformational leadership of intervention and control group after median split of value congruence and proactivity (educational sector sample)**

<table>
<thead>
<tr>
<th>Samples</th>
<th>Transformational leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group value congruence</td>
<td>.50</td>
</tr>
<tr>
<td>Control group value congruence</td>
<td>-.46</td>
</tr>
<tr>
<td>Experimental group proactivity</td>
<td>1.00</td>
</tr>
<tr>
<td>Control group proactivity</td>
<td>-1.33</td>
</tr>
</tbody>
</table>

The findings in table 9 support hypothesis 3b: The effect size of transformational leadership of leaders with a high pre-training proactivity \( (d = 1.00) \) is higher than the overall experimental group increase in proactivity \( (d = .52) \). Pre-training proactivity had an impact on the training and coaching of transformational leadership. Leaders with high pre-training proactivity had greater post-training levels of transformational leadership than leaders with low pre-training proactivity.

To additionally support hypothesis 3b, group differences on the post-test scores were assessed by using analysis of variance (two factor ANOVA with repeated measurement, inner subject factor: time; between factor: group). As a potential additional impact factor, proactivity was included. A significant impact as a covariate was found, \( F (1, 49) = 7.78, p < .001 \).

Table 10 shows the experimental group’s correlations of transformational leadership, transactional leadership, value congruence, proactivity and commitment before and after training and coaching of transformational leadership.
4. Results

Correlations between transformational leadership and value congruence before the training cannot be found. A significant small post-training correlation $r = .28$ indicates a weak support for hypothesis 2c. Correlations between transformational leadership and proactivity before the training cannot be found. A significant medium post-training correlation $r = .47$ indicates a weak support for hypothesis 3c.

No support for hypothesis 4b can be found. There is no positive post- and pre-training correlation between transformational leadership and affective and normative commitment. Only one significant correlation can be reported: There is a small correlation between normative commitment towards the job and transformational leadership (pre-training) of $r = .33$. 
Table 10: Experimental group correlations of transformational leadership, transactional leadership, value congruence, proactivity and commitment before (under the diagonal) and after training (above the diagonal) and coaching (educational sector sample)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Tf1/Tf2</th>
<th>Ta1/Ta2</th>
<th>Pro1/Pro2</th>
<th>Vc1/Vc2</th>
<th>OCa1/OCa2</th>
<th>OCc1/OCc2</th>
<th>OCn1/OCn2</th>
<th>JCa1/JCa2</th>
<th>JCc1/JCc2</th>
<th>JCn1/JCn2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tf1/Tf2</td>
<td>1</td>
<td>.12</td>
<td>.47**</td>
<td>.28*</td>
<td>-.01</td>
<td>-.31*</td>
<td>-.03</td>
<td>.11</td>
<td>-.09</td>
<td>-.26</td>
</tr>
<tr>
<td>Ta1/Ta2</td>
<td>.55**</td>
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<td>.03</td>
<td>.04</td>
<td>-.21</td>
<td>-.18</td>
<td>-.04</td>
<td>.03</td>
<td>.05</td>
<td>-.25</td>
</tr>
<tr>
<td>Pro1/Pro2</td>
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<td>1</td>
<td>-.26</td>
<td>.44**</td>
<td>-.21</td>
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<td>Vc1/Vc2</td>
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<td>-.17</td>
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</tr>
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<td>OCa1/OCa2</td>
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<td>-.01</td>
<td>.37*</td>
<td>-.68**</td>
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<td>.27</td>
</tr>
<tr>
<td>OCc1/OCc2</td>
<td>-.12</td>
<td>.09</td>
<td>-.01</td>
<td>.12</td>
<td>.04</td>
<td>1</td>
<td>.21</td>
<td>-.01</td>
<td>.56**</td>
<td>.31*</td>
</tr>
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<td>OCn1/OCn2</td>
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<td>-.13</td>
<td>.19</td>
<td>.05</td>
<td>.18</td>
<td>.41**</td>
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<td>.37*</td>
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<td>.50**</td>
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<tr>
<td>JCa1/JCa2</td>
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<td>-.33*</td>
<td>.39**</td>
<td>.12</td>
<td>.53**</td>
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<td>.07</td>
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<tr>
<td>JCc1/JCc2</td>
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<td>-.07</td>
<td>-.02</td>
<td>-.19</td>
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<td>.47**</td>
<td>.25</td>
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<td>.42**</td>
</tr>
<tr>
<td>JCn1/JCn2</td>
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<td>.07</td>
<td>.39**</td>
<td>.57**</td>
<td>.01</td>
<td>.72**</td>
<td>1</td>
</tr>
</tbody>
</table>

Acknowledgements: Tf = transformational leadership; Ta = transactional leadership; Pro = proactivity; Vc = value congruence; OCa = affective organizational commitment; OCc = calculative organizational commitment; OCn = normative organizational commitment; JCa = affective commitment towards the job; JCc = calculative commitment towards the job; JCn = normative commitment towards the job

Pearson-correlations
* p < .05; ** p < .01
5. Discussion

First, the results of the training and coaching of transformational leadership are discussed. Then, the coherence between value congruence, proactivity, commitment and transformational leadership is examined. Finally, practical implications for the practice are reported, followed by limitations of the conducted research. An outlook on future research is given.
5.1 Training and coaching of transformational leadership

5.1.1 Effectiveness of the combination of transformational leadership training and coaching

Transformational leadership is a well-analyzed leadership style and its success in many different organizational fields has been indicated (e.g., Lowe et al., 1996). However, there is limited literature on the effort to improve leader’s transformational leadership skills. The existing research has been reported in chapter 2.1.3 of this work. Reported research about the training of transformational leadership in Europe is not known to the author. To fill this gap, this research has been conducted in three different areas and with different samples. In general, the training and coaching of transformational leadership can be evaluated as successful.

The meta analysis of Arthur et al. (2003) about the overall effectiveness of trainings reveals an average $d$ of .62. Both the service sector sample and the education sample show $ds$ above this average ($d = .92; d = .72$). These findings can be supported by an analysis of variance for the education group: Transformational leadership showed a significant effect over group and time, $F (1, 54) = 7.63, p < .001$, meaning that after the training a leader of the experimental group had greater levels of transformational leadership than a leader of the control group. The effect sizes of transformational leadership (Cohen’s $ds$) of the experimental group are positive. In comparison to other trainings (Arthur et al., 2003), this training and coaching of transformational leadership can be evaluated as successful above the average.

Below, important factors accountable for the success of the training are presented. First of all, the 360° feedback is an important factor of the training. 360° feedback (Luthans & Peterson, 2003), in general, is a positively evaluated instrument of human resource development. In this research, it helped to find development potentials and strengths of each leader. The findings individually support the leaders to improve their leadership skills in contrast to other trainings where impersonal advice for the whole training group is given.

Second, the combination of leadership training and coaching can be seen as one of the factors of success. Results of sample one (industrial management sector) showed a small effect for coaching. The effect for training and coaching in combination is clearly
higher. The coaching and the important support from the other participating leaders help participants to improve their leadership development plan and their transformational leadership skills.

Third, the duration of the training program can also be considered as a factor explaining the positive effect. In contrast to other trainings (e.g., Barling, Weber, & Kelloway, 1996; Towler, 2003), the duration of two days obviously enables the participants to work longer on their leadership development plan.

Fourth, peer feedback (in the 360° feedback, in the “teams of two”-exercise in the training and in the coaching) played a significant role in the success of the training (Luthans & Peterson, 2003). The participants had an insight into the opinions of the other participants and they were given the chance to see their situations from another angle.

Fifth, goal setting (e.g., Locke & Latham, 2002) in the form of a development plan of the participants helped to ensure the transfer of the learned actions. By setting specific goals, the occupation with the training endured and did not stop after the training. The participants had a clear objective and they want to reach and follow that objective in the day-to-day business.

Future research needs to be conducted to analyse the share of effectiveness of each discussed element. Which elements are the most successful and which elements can be left out of the training to save time? Single trainings with only one element of the presented training could detect the effectiveness of each element. The most valuable elements then could be combined to create a more effective training.

5.1.2 Effectiveness of the coaching of transformational leadership

The first effort to evaluate the effectiveness of coaching was made with a small sample of managers (sample 1, industrial management sector). In addition to the small sample size ($N = 7$), this sample lacked a control group. The Peer-based Team Coaching showed a small effect for transformational leadership ($d = .33$), meaning that the participation in a group coaching increased the leader’s transformational leadership. These findings can be seen as an important step towards a better understanding of the effectiveness of coaching. Team coaching has a positive effect and helps leaders to improve their leadership skills. Of course, further research is needed to duplicate these results and to evaluate coaching. A control group design with team coaching in different or-
ganizations should be implemented. In the practical field, coaching is an important part of human resource development (Hall, Seibert & Hollenbeck, 1999). Despite its wide implementation, there is little research dealing with its evaluation. The main risk of a lack of evaluations is that there is no proof for the effectiveness of coaching. Huge sums of money are spent on coaching, despite not knowing whether coaching really helps the participants to be better leaders.

The small effect of the coaching (in contrast to the large effect of the combination of training and coaching) underlines the importance of the combination of those two elements. In the training, participants develop their leadership plan and in the coaching they get important feedback from their peers. Not having the important leadership impulses from the training, the coaching cannot be as successful as the combination of these two elements. Coaching itself may not give enough input about the basis of leadership, but once the basis has been established, a participant can use the coaching to practice and discuss his/her leadership skills.

5.1.3 The effect of the control group

Hypothesis 1 can be supported: The effect sizes of transformational leadership (Cohen’s $d$s) of the experimental group are distinctly bigger than the effect sizes of transformational leadership of the control group (cf. table 4 and table 8). The increase of transformational leadership in the experimental group is bigger than the increase of transformational leadership in the control group. After the training, a leader in the experimental group had greater levels of transformational leadership than a leader of the control group.

Anyhow, in both samples a positive effect of transformational leadership for the control groups could be observed. The service sector waiting control group showed a medium effect ($d = .46$). The waiting control group of the education sample showed the biggest effect occurring in this thesis ($d = 1.84$). The control group of the education sample decreased in transformational leadership, showing a negative effect ($d = -.56$).

These findings are important for future training practices: Both waiting control groups (in anticipation of the training) actually improved their transformational leadership by participating in the 360° feedback. This intervention (with its questions regarding transformational leadership styles) improves the leader’s levels of transformational leader-
ship. A practical implication may be only to take part in the 360° feedback. An improvement in transformational leadership is likely to occur due to this economic and time saving way of human resource development. It would also be interesting to see how a leader’s transformational leadership improves after having been given the results of the feedback. A third time of measuring (e.g. three months after the second time of measuring) is suggested to identify the impact of the feedback.

5.1.4 Transferring the concept of transformational leadership to Germany

During the last decade, the concept of transformational leadership was transferred from North America (where most of the research was done) to Europe (Den Hartog et al., 1997; Rowold, 2003). Recent findings underline relevance of transformational leadership as being characteristic excellent leadership in 60 nations (Den Hartog et al., 1999; House et al., 1999), amongst them European countries (Brodbeck et al., 2000).

However, in Germany, transformational leadership is regarded with scepticism and considered as an overemphasised “North American phenomenon” that cannot be easily transferred (Felfe et al., 2004). Negative consequences of transformational leadership, such as blind obedience and addiction to the leader or risks derived from political and religious contexts were brought into discussion (e.g., Neuberger, 2002). In addition to this, the danger of a relapse to basic heroic “great-man theories” is debated. As concerns a further option of cultural specificity, the great-man theory shows many parallels with transformational leadership, which may prove problematic for the concept under discussion. In Germany, there is a marked reluctance to the concept of the great man theory because of the memory of the bad experience with “Führern”. In the USA, the idea of a superior leader personality is accepted with enthusiasm.

The results of this training underline that transformational leadership is a successful way of leading with a high acceptance from the participants. The participants gave a positive feedback and the concept of transformational leadership could easily be adapted to the participants’ work environments. Nevertheless, a critical discussion about the chances and risks of transformational leadership was implemented into the training.

Until present, only few studies have examined the role of transformational leadership in German organizations. More research should be conducted to emphasize the positive effects observed in this thesis.
5.1.5 High characteristics of transactional leadership

Since 1980, general findings have been gathered which maintain that the best leaders are both transactional and transformational. Transactional leaders act within the given constraints of an organization, whereas transformational leaders change organizations (Bass, 1985). The training and coaching were designed to improve the participants’ transformational leadership. Nevertheless, transactional leadership was quantified at all times of measuring. Table 4 (p. 57) and table 8 (p. 63) show the effect results for both samples. Transactional leadership in the experimental group had a medium effect ($d = .59$ and $d = .41$) for both samples. This effect can be interpreted by two different explanations.

First, there could be a measuring effect also found in the transformational leadership effect of the control groups: By measuring the transactional scales, the participants learn how transactional leadership is defined and take those behaviors into account. This also could explain the rise in transactional leadership for the control groups ($d = .33$ and $d = 1.83$).

Second, the concept of transactional leadership as an important part of the Full Range Leadership Model was part of the theoretical input at the first day of the training. The participants were asked to choose a development potential and a strength from the transformational factors (found in their feedback report) for their development plan. For some participants, this was difficult, as their leadership experience was limited. Often, transformational leadership behavior is based on groundwork of transactional leadership behavior. So, it was the less experienced participants’ effort to improve their transactional behavior as well as their transformational behavior. All activity related leadership styles were taken into account. Due to the training, transactional leadership was more salient.

To control these concerns, training with only transformational scales and a reduced MLQ measurement (only the transformational scales) should reduce the participants’ raise in their transactional characteristics.

Transformational leadership is becoming a more and more important universal issue because the 21st century will be dominated by knowledge work and it requires more envisioning, enabling, and empowering leadership, all of which are central concepts of transformational leadership.
5. Discussion

Transactional leadership may be an important part of leadership but the leadership must go beyond the transactional reward-punishment exchange relationship.

5.1.6 Application of the training

The training and coaching of transformational leadership showed good results in different fields of application. It was arranged in different domains: In general industrial management, in the educational sector and in the service sector. In all different areas, the participants’ feedback was good and a rise in transformational leadership could be found. The training was not especially adapted to the different samples. Due to the 360° feedback, the individual development plans and the work with the participants’ individual strengths and weaknesses, the training can be implemented in all different domains.

The participants of the training and coaching of transformational leadership were on different hierarchical levels. It was the author’s plan to train leaders from different hierarchical levels of the same organization in different training designs. Given the small number of participants and training dates, leaders from different hierarchical levels had to be trained in the same training group. This was done with the approval of all participants. The participants’ feedback regarding this procedure was good. The hierarchy mix led to a better understanding of the different groups and the results of the individual feedback reports were kept anonymous (if considered necessary by the leader).

5.1.7 Experimental design

In this thesis, a quasi-experimental design was applied. A pre- and post-test measuring with a control group was implemented. Several limitations, concerning this design occurred: First, there was no randomization of the leaders. All leaders of the cooperating organizations were asked to participate in the training. Leaders who were not able to take part in the training, but still were interested in the 360° feedback and its results were assigned to the control group. Randomly allocating the leaders to the control and experimental group was not possible.

The number of post-training measurements was limited. The cooperating organizations were not interested in further feedbacks, as costs and time of the leaders were
limited. It was the author’s ambition to avoid the mentioned limitations, but organizational specifications only supported a quasi-experimental design. Further research with an experimental design needs to be conducted.
5.2 Value congruence and transformational leadership

Important research questions on transformational leadership are how transformational leaders develop, share and sustain a vision to elevate follower motivation to higher levels of performance. It is of high interest, how they transform followers’ personal values into a collective or shared value system that each follower can identify with over time. Previous research has supported the positive role that value congruence plays in the leadership process (Meglino et al., 1989). In this research, the value congruence between leaders and followers was measured to better understand their mutual coherence.

A high and medium effect of value congruence for the experimental groups could be found ($d = 1.02$, $d = .51$, respectively). Leaders of the experimental group have greater value congruence after the training than before. There was a small effect in one waiting control group ($d = .24$) and a negative effect for one control group ($d = -.26$) and for one waiting control group ($d = -.28$). In sum, for the control groups, there is a small increase to small decrease of value congruence.

The impression of coherence between value congruence and transformational leadership of past research could be confirmed. It can even be postulated that the training of transformational leadership leads to higher value congruence. Transformational leaders motivate their followers by raising their followers’ level of awareness about the importance and value of designated outcomes, and by transforming followers’ personal values to support the collective goals for their vision.

An additional analysis examined the influence of pre-training value congruence on the development of transformational leadership. For the service sector sample, hypothesis 2b could be confirmed: The effect size of transformational leadership of leaders with high pre-training value congruence ($d = 1.50$) is higher than the overall experimental group increase in transformational leadership ($d = 1.02$). For the educational sample, value congruence had a significant impact as a covariate, $F(1, 53) = 7.31$, $p < .001$, supporting hypothesis 2b. In this sample, the comparison of effect sizes after median split the group did not support hypothesis 2b. The effect size of transformational leadership of leaders with high pre-training value congruence ($d = .50$) is as high as the overall experimental group increase in transformational leadership ($d = .51$).
Nevertheless, these findings indicate the importance of values for the process of transformation. A leader, who shares his or her values with his or her followers in a more expressive way, has a greater rise in transformational leadership than a leader with a poorer value share. This strongly supports the fact that the share of values is an important part of transformational leadership.

These findings should be the basis for further research with a larger number of participants. It is of great interest to test the statistical coherences between value congruence and transformational leadership with path analysis to confirm the moderating effect of value congruence.
5.3 Proactivity and transformational leadership

The prototypic proactive person actively identifies opportunities and demonstrates a strong drive toward action. He or she enjoys persuading others to accept their ideas and relishes challenging the status quo. The proactive individual energetically develops and implements strategies to effectively manage the environment. He or she is relatively unconstrained by situational pressures and perseveres until objectives are realized (Deluga, 1998). Transformational leadership describes persons exhibiting a strong propensity to establish challenging goals and a vigorous drive to reach goals (e.g., Yukl, 2002). Comparing those two concepts, there are clear parallels and it is of great interest, whether proactivity can be seen as a moderator for transformational leadership.

A medium to high effect for proactivity in the experimental groups was found ($d = .52$ and $d = .72$). After the training and coaching of transformational leadership, leaders of the experimental group have a higher proactivity than before. Leaders of all control groups have smaller levels of proactivity ($d = -.43$; $d = -.01$ and $d = -.33$). It can be stated that the training and coaching of transformational leadership is connected to greater levels of the leaders’ proactivity.

To test whether there is a moderating effect of proactivity, multivariate analysis of variance (proactivity as a covariate) were conducted. A significant impact of proactivity as a covariate was found, $F (1, 49) = 7.78$, $p < .001$ in the education sample.

To further assess the coherence between transformational leadership and proactivity, leaders with a high pre-training proactivity were analyzed. Support for hypothesis 3b could be found in both samples: The effect size of transformational leadership of leaders with a high pre-training proactivity ($d = .92$ and $d = 1.00$) is bigger than the overall experimental group increase in proactivity ($d = .72$ and $d = .52$). Pre-training proactivity had an impact on the training and coaching of transformational leadership.

Leaders with a high proactivity had a greater receptivity for transformational leadership. Their ability to see problems as challenges and their way of positively encountering new situations makes them more open to the concept of transformational leadership. On the other hand, it can be argued that they already had certain relevant personal traits (high proactivity), conceptually strongly related to transformational leadership. No proof for this assumption can be found in the pre-training correlations. There is no significant correlation between transformational leadership and proactivity before the train-
The high pre-training proactivity helped the leaders to greater improve in transformational leadership. It cannot be stated that they already had personal traits related to another, only named differently. Proactivity can be seen as a moderator for transformational leadership.

These findings should be the basis for further research with a larger number of participants. It is of great interest to test the statistical coherences between proactivity and transformational leadership with path analysis to confirm the moderating effect of proactivity.
5.4 Commitment and transformational leadership

The coherence between transformational leadership and organizational commitment is well known and researched (e.g., Felfe & Goihl, 2002). This research tried to identify two new backgrounds. In all other reported analysis, the commitment of the employees was taken into account. In this work, the leader’s commitment was measured. In addition to this, there is no known research about the training of transformational leadership and its coherence between commitment. Due to past findings, normative and affective commitment were focused on.

5.4.1 Affective commitment

There is only little support for the coherence between the leaders’ affective commitment and transformational leadership. Only one effect of affective commitment towards the job \( (d = .70) \) can be found (in the service sector sample). For the educational sample, hypothesis 4a partially can be supported: The effect of affective commitment towards the job is very small \( (d = .06) \) but the control group effects both are negative \( (d = -.24 \) and \( d = -.50) \). There is also no rise in the post-training correlations in both samples of affective commitment.

There is only little support for the coherence between affective commitment and transformational leadership. Employees with a high degree of affective commitment stay in the organization because they want to. By being a model for his or her employees, the leader is likely to have a stronger commitment towards the organization and his or her job than a less transformational leader. A leader high in affective commitment shows emotions and values and addresses them to his or her team. A rise of transformational leadership for the participants of the training could be found. But, for some leaders (especially in the educational group) there were plans to change their employer/the institution. It is quite common for scientists working at a university or laboratory to change the institution after some years to accelerate the career progress. Another explanation could be the research of the participants: For them, their research outcome is way more important than the organization where the research work has been done. The organization can be seen as a means to an end. This could explain the low affective commitment towards the organization and the rise of affective commitment towards the job. Nevertheless, even the job parameters are supposed to change for many researchers. To
better analyze the coherence between affective commitment and transformational leadership, a sample with less intent to change the organization and the job would be important. To control these parameters, leaders with a longer retention period could be trained.

5.4.2 Normative commitment

A transformational leader is supposed to be strong in normative commitment. He or she has an idealized influence on the subordinates and should be able to influence them to stay in the organization. He or she ought to communicate the company’s norms and values.

Similar findings for the affective commitment can be reported about normative commitment. However, there is no strong support for the coherence to transformational leadership and the training of transformational leadership. A small effect for normative organizational commitment ($d = .23$) in the service sector sample can be postulated. Contrary to the postulated hypotheses, the normative commitment towards the job has a negative effect, shown in both samples ($d = -.56$ and $d = -.08$).

Highly normatively committed employees feel an obligation to stay because of shared norms and values. They also could be influenced by important people telling them to stay with the organization. They eventually reject better alternatives, as they would feel guilty by leaving the organization (Meyer, Bobocel & Allen, 1991). The findings of this research clearly demonstrate the difference between the followers’ perception of the leaders’ normative commitment and the perception of the leaders. The findings of past research could not be confirmed by measuring the leaders’ self assessed normative commitment.

Further research analyzing the self perceived commitment of leaders and its coherence between transformational leadership should be conducted. Furthermore, there is a great interest in measuring both the leader’s perception of their commitment and the follower’s perceived commitment.

Idealized Influence is a transformational leadership style with a leader being a role model and trying to communicate certain values. The leader and his or her followers should have strong results in normative commitment. A leadership training concentrat-
ing on the leadership style “Idealized Influence” could further analyze the coherence between transformational leadership and commitment.
5.5 Implications for practice
Training and coaching of transformational leadership is a positively evaluated facet of human resource development. The training and coaching has an effect above the average compared to other trainings (Arthur et al., 2003). Transformational leadership training can be applied to Germany and is no longer a North American phenomenon, where research of its success exists.

Transformational leadership is a well analyzed leadership style and a lot of research has proven its effectiveness (e.g., Dumdum et al., 2002). However, little work has been published dealing with its training (see figure 4). But the results of these published studies highlight that training of transformational leadership is a successful way to increase a leader’s performance. This thesis can indicate the positive effect of the training for the German speaking countries.

The combination of training and coaching promises an effective way of improving the leadership style of leaders. The 360° feedback (Luthans & Peterson, 2003) plays an important role: Due to the analysis of individual strengths and weaknesses, the training has a great person-fit and each participant has his or her own development fields. In contrast to other trainings merely dealing with leadership in general, this training perfectly supports the participating leaders in their development. The coaching, in addition to the first-day training, also has an effect: The effect size of transformational leadership of the coaching ($d = .33$) is below the average, but it should be taken into account that some elements of the experimental design are to be improved (e.g., the lack of a control group). Nevertheless, the second-day coaching is an important amendment to the theoretical introduction of the leadership styles on the first day. The generated development plan of the participants can be reviewed by their peers and important feedback and help emerges from it. Participants noted that the coaching day was a great extension to the theory-loaded first day.

A common problem of practitioners is the lack of implemented leadership training. This work is another important impulse for practitioners, as now a well-evaluated training (with clearly defined elements) for the improvement of leadership skills exists.

The fact that the measuring of the leadership style has an impact should be considered critically. In both samples, there was a positive effect of transformational leadership for
the control groups. The service sector waiting control group indicated a medium effect 
\(d = .46\). The waiting control group of the education sample showed the biggest effect 
found in this research \(d = 1.84\). These findings prove the fact that the measurement of 
transformational leadership with the MLQ increases participants’ occurrences. On the 
one hand, it might be a memory effect, as three months between the measuring may not 
be long enough. Participants might want to increase in their ratings. On the other hand, 
the participants really improved in transformational leadership. The questions of the 
MLQ tend to specific behavior which, due to the answering of the participants, might 
have changed. If a measurement of the leadership style changes the leadership behavior, 
an application for the practical sector emerges. The measurement is (in comparison to 
the two-day training) a very economic intervention. In addition to the feedback results, 
it could be an alternative to the training and coaching of transformational leadership.

It was discussed earlier that the pre-training value congruence and proactivity of the 
participants has an impact on the leader’s improvement in transformational leadership: 
Leaders with high pre-training value congruence had a greater increase in transforma-
tional leadership and leaders with high pre-training proactivity had a greater increase in 
transformational leadership. This is of great importance for the practise. It can be stated 
that training of transformational leadership better fits leaders with high proactivity and 
value congruence. Possible participants for the training and coaching of transforma-
tional leadership could be tested prior to the training and the training success could be 
predicted due to their characteristics in value congruence or proactivity.

The training and coaching of transformational leadership showed good results in differ-
ent organizations and in different fields of work. There is a clear need for more research 
with different samples, but this thesis’ findings in different areas are an important proof 
for the generalization of the training.
5. Discussion

5.6 Limitations of the research

The main limitation of this research is the small number of participants. In comparison to other published training studies, this study has an equal number of trained leaders (e.g., Towler, 2003). But, with sample sizes of this magnitude, the problem of statistical significance still remains. The effect size can be considered as an appropriate solution, but to amplify the acceptance of training research in the field of psychology, greater samples are needed. The main problem is still the lack of willingness of corporations to support such research.

Another problem was the different sample size in the training groups. It was planned to train groups of 10 to 12 leaders in a two-day training. Due to organizational problems (different work times and other important appointments) the leaders could not find common training dates. The average number of participants was seven and the variation was from five to 12 leaders in one group. It seems obvious that in a smaller group, the support by the trainer (e.g., for feedback) was higher than in a larger group. There was also more time to deal with participants’ questions and problems in general. On the other hand, in a smaller group, the number of feedback giving coaches on the second day was smaller and led to less input regarding the leadership development plan.

The training and coaching of transformational leadership tends to improve the leaders’ transformational leadership. To ensure this, the development plans contained elements of transformational leadership. Transformational leadership behavior is based on groundwork of transactional leadership behavior. So, it was the less experienced participant’s effort to improve his or her transactional behavior as well as his or her transformational behavior. To solve this problem, trainings for the different parts of transformational leadership (inspirational motivation, individualized consideration, intellectual stimulation and idealized influence) could be developed. Leaders with a weakness in one part of transformational leadership then could work with other leaders (having the same development potential) on the improvement of their leadership style.

The training and coaching of transformational leadership is designed to improve the leaders’ transformational leadership behavior in their work context. The transfer of the training is an important criterion. The 360° feedback was arranged three months after
the training. A practical implementation of the learned leadership behavior can be expected after three months. More times of measuring after the training could better record participants’ improvement (e.g., a third point of measurement one year after the training). Long-term studies should be conducted.

Booster sessions after the training (e.g., Barling et al., 1996) were planned to be implemented in the design of this research. Coaching sessions with a gap of three months after the training for two to four times should help participants to improve their transformational leadership behavior. However, the cooperating organizations showed poor interest in a long-term design, as more time for the leaders and higher cost for the organizations were needed. Further research should implement booster sessions with additional times of measurement to explore the effect of these extra efforts.
5.7 Future research

Evaluation studies dealing with training and coaching of leadership are still rare. Future research on the effects of enhancing transformational leadership might be beneficial for several reasons.

First, future research should expand the focus of considered outcomes. The findings of value congruence, proactivity and commitment are important employee and employer attitudes. Financial outcome criteria are of a very high interest to strengthen the important role of leadership and to measure a leader’s effort in the organizational context.

Second, the present results must be replicated using larger samples and different organizational settings. If such replications are successful, the usefulness of transformational leadership would be extended.

Third, one time of measurement after the training took place, however, this might not reflect the optimal number of measurements and time required for leadership training to exert its effects. It might be investigated whether the benefits are maintained over a longer period of time. Although the plausibility of this argument is questioned by the significant findings obtained, future theorizing and research should focus on identifying more precisely when significant effects are expected to emerge.

Fourth, the combination of training and coaching shows promise. First initial findings in this research underline the effectiveness of leadership coaching. There is a clear need of coaching evaluation of transformational leadership.

Fifth, the training and coaching were designed to enhance participant’s transformational leadership. Trainings and coaching for the different parts of transformational leadership are of interest. Booster sessions for the enhancement of single transformational scales would lead to a better adapted training for each participant and would help evaluating transformational leadership.

Sixth, evaluating studies dealing with training and coaching of transformational leadership in Germany and Europe are rare. Further research in this area is needed to support first findings of the training success of transformational leadership. Cross cultural comparisons could underline further proof for the fact that transformational leadership is a universal issue and that it can be trained successfully in different cultural settings.
Seventh, the control group design of this research is to be improved in further work. Real control groups are to be preferred unlike waiting control groups. The high effects of the waiting control groups in comparison to the control groups are to be controlled.

Eighth, hierarchy levels were mixed in this training of transformational leadership, making it impossible to test the effect of the training on different hierarchy levels. A goal for future research could be to test whether the training has congruence between the leaders’ levels of hierarchy.


APPENDIX
A: Multifactor Leadership Questionnaire

The MLQ items (and the MLQ Feedback Report) are copyright protected and can be inquired at the author or PD Dr. Jens Rowold.
B: Questionnaire for the measurement of value congruence between employees and their superior

**Fragebogen zu der Übereinstimmung zwischen den Werten des Mitarbeiters und denen des Vorgesetzten**

Name des Teamleiters/Kollegen: ____________________________

Datum: ______________

Wie füllen Sie diesen Fragebogen aus?


**Anonymität:**


<table>
<thead>
<tr>
<th>Diese Aussage trifft...</th>
<th>gar nicht zu</th>
<th>eher nicht zu</th>
<th>teilweise zu</th>
<th>eher zu</th>
<th>völlig zu</th>
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<tbody>
<tr>
<td>1 Ich unterstütze die Wertvorstellungen meines Vorgesetzten / meiner Vorgesetzten voll und ganz</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>2 Die von meinem Vorgesetzten / meiner Vorgesetzten vertretenen Werte entsprechen meinen eigenen, persönlichen Werten.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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<tr>
<td>3 Es gibt eine hohe Übereinstimmung zwischen meinen Wertvorstellungen und denen meines Vorgesetzten / meiner Vorgesetzten.</td>
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<tr>
<td>4 Mein Vorgesetzter / meine Vorgesetzte tritt für dieselben Werte ein wie ich.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>5 Ich begeistere mich für dieselben Werte wie mein Vorgesetzter / meine Vorgesetzte.</td>
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<td>○</td>
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<td>○</td>
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Vielen Dank für Ihre Teilnahme!
C: Questionnaire of Personal Initiative: Self-reported initiative

Fragebogen zur Proaktivität

Name: __________________________
Datum: ______________

Wie füllen Sie diesen Fragebogen aus?


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<tr>
<th>In wie weit stimmen Sie mit diesen Aussagen überein?</th>
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<td></td>
<td>gar nicht zu</td>
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<tr>
<td>1. Ich gehe Probleme aktiv an.</td>
<td>O  O  O  O  O</td>
</tr>
<tr>
<td>2. Wenn etwas schief geht, suche ich sofort nach Abhilfe.</td>
<td>O  O  O  O  O</td>
</tr>
<tr>
<td>3. Wenn sich Möglichkeiten anbieten, etwas zu gestalten, dann nutze ich sie aus</td>
<td>O  O  O  O  O</td>
</tr>
<tr>
<td>4. Ich ergreife sofort die Initiative, wenn andere dies nicht tun.</td>
<td>O  O  O  O  O</td>
</tr>
<tr>
<td>5. Ich nehme Gelegenheiten schnell wahr, um meine Ziele zu erreichen.</td>
<td>O  O  O  O  O</td>
</tr>
<tr>
<td>6. Ich tue meist mehr als von mir gefordert wird.</td>
<td>O  O  O  O  O</td>
</tr>
<tr>
<td>7. Ich bin besonders gut darin, Ideen umzusetzen.</td>
<td>O  O  O  O  O</td>
</tr>
</tbody>
</table>

Vielen Dank für Ihre Teilnahme!
D: Questionnaire for the acquisition of affective, calculative and normative commitment

Fragebogen zum Commitment

Name: ____________________________
Datum: ________________________

Bei den Fragen kommt es uns auf Ihre subjektiven Einschätzungen an, d.h. es gibt keine richtigen oder falschen Antworten. Uns interessiert nur Ihre persönliche Meinung. Bitte beantworten Sie alle Fragen zügig und vertrauen Sie dabei Ihrem spontanen Urteil. Wenn dennoch eine Aussage für Sie schwierig einzuordnen erscheint, versuchen Sie diese bitte trotzdem zu beantworten.

Verbindlichkeit und Identifikation mit der Organisation
Anhand der folgenden Aussagen möchten wir erfahren, wie sehr Sie sich der Organisation, für die Sie arbeiten, verbunden fühlen.

<p>| Schätzen Sie bitte ein, wie zutreffend die einzelnen Aussagen für Sie sind. | Diese Aussage trifft... |
|---|---|---|---|---|---|
| Ich wäre sehr froh, mein weiteres Arbeitsleben in dieser Organisation zu verbringen. | gar nicht zu | eher nicht zu | teilweise zu | eher zu | völlig zu |
| Es wäre mir zu vielen Nachteilen für mich verbunden, wenn ich momentan diese Organisation verlassen würde. | | | | | |
| Ich fühle mich emotional nicht sonderlich mit dieser Organisation verbunden. | | | | | |
| Ich bin trotz darauf, dieser Organisation anzugehören | | | | | |
| Zu vieles in meinem Leben würde sich verändern, wenn ich diese Organisation jetzt verlassen würde. | | | | | |
| Ich glaube, dass ich momentan zu wenige Chancen habe, um einen Wechsel der Organisation ernsthaft in Erwägung zu ziehen. | | | | | |
| Ich habe schon zu viel Kraft und Energie in diese Organisation gesteckt, um jetzt noch an einen Wechsel zu denken. | | | | | |
| Viele Leute, die mir wichtig sind, würden es nicht verstehen oder wären enttäuscht, wenn ich diese Organisation verlassen würde. | | | | | |
| Selbst wenn es für mich vorteilhaft wäre, fände ich es nicht richtig, diese Organisation zu verlassen. | | | | | |
| Ich würde mich irgendwie schuldig fühlen, wenn ich diese Organisation jetzt verlassen würde. | | | | | |
| Ich empfinde ein starkes Gefühl der Zugehörigkeit zu meiner Organisation. | | | | | |</p>
<table>
<thead>
<tr>
<th>Frage</th>
<th>Antwortmöglichkeiten</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ich denke, dass meine Wertvorstellungen zu denen der Organisation passen.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Es macht keinen guten Eindruck, häufig die Organisation zu wechseln.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Ich würde die Organisation jetzt nicht verlassen, weil ich mich einigen Leuten darin verpflichtet fühle.</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

**Identifikation mit dem Beruf und der Tätigkeit**

Auf der vorherigen Seite haben wir danach gefragt, wie sehr Sie sich der Organisation, für die Sie arbeiten, verbunden fühlen. Auf dieser Seite möchten wir gerne wissen, wie sehr Sie sich Ihrem **Beruf**, bzw. Ihrer **Tätigkeit** verbunden fühlen. Schätzen Sie bitte ein, wie zutreffend die einzelnen Aussagen für Sie sind.

<table>
<thead>
<tr>
<th>Schätzen Sie bitte ein, wie zutreffend die einzelnen Aussagen für Sie sind.</th>
<th>Diese Aussage trifft...</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ich wäre sehr froh, mein weiteres Arbeitsleben in diesem Beruf verbringen zu können.</td>
<td>gar nicht zu eher nicht zu eher teils zu eher zu völlig zu</td>
</tr>
<tr>
<td>2 Ich bin stolz darauf, dass ich in diesem Beruf arbeite.</td>
<td></td>
</tr>
<tr>
<td>3 Meine jetzige Tätigkeit macht mir Spaß.</td>
<td></td>
</tr>
<tr>
<td>4 Ich würde mir wünschen, meine jetzige Tätigkeit auch in Zukunft auszuüben.</td>
<td></td>
</tr>
<tr>
<td>5 Zuviel in meinem Leben würde durchaus andere Geraten, wenn ich den Beruf jetzt wechseln würde.</td>
<td></td>
</tr>
<tr>
<td>6 Viele Leute, die mir wichtig sind, würden es nicht verstehen, oder wären enttäuscht, wenn ich meinen jetzigen Aufgaben- und Tätigkeitsbereich wechseln würde.</td>
<td></td>
</tr>
<tr>
<td>7 Ich habe schon zu viel in diesem Beruf investiert, um jetzt noch an einen Wechsel zu denken.</td>
<td></td>
</tr>
<tr>
<td>8 Ich werde weiterhin in meinem Beruf arbeiten, weil es keine Alternativen für mich gibt.</td>
<td></td>
</tr>
<tr>
<td>9 Ich finde, dass man seinem Beruf treu bleiben sollte.</td>
<td></td>
</tr>
<tr>
<td>10 Ich habe schon zu viel in meinen jetzigen Aufgaben- und Tätigkeitsbereichen investiert, um noch an eine Neuorientierung zu denken.</td>
<td></td>
</tr>
<tr>
<td>11 Ich glaube es wäre nicht richtig, meinen jetzigen Beruf und Tätigkeitsbereich zu verlassen, auch wenn ich selbst Vorteile davon hätte.</td>
<td></td>
</tr>
<tr>
<td>12 Es ist für mich von großer Bedeutung, gerade diesen Beruf auszüüben.</td>
<td></td>
</tr>
</tbody>
</table>
Identifikation mit dem Beruf und der Tätigkeit
Auf der vorherigen Seite haben wir danach gefragt, wie sehr Sie sich der Organisation, für die Sie arbeiten, verbunden fühlen. Auf dieser Seite möchten wir gerne wissen, wie sehr Sie sich Ihrem Beruf, bzw. Ihrer Tätigkeit verbunden fühlen. Schätzen Sie bitte ein, wie zutreffend die einzelnen Aussagen für Sie sind.

13 Es wäre mit zu vielen Nachteilen verbunden, in meinem Beruf einen anderen Aufgaben- oder Tätigkeitsbereich zu übernehmen. 1 2 3 4 5
14 Mit meiner Tätigkeit kann ich mich identifizieren. 1 2 3 4 5
15 Ich denke, dass ich meine Wertvorstellungen in meiner jetzigen Tätigkeit verwirklichen kann. 1 2 3 4 5
16 Es macht keinen guten Eindruck, den Beruf zu wechseln. 1 2 3 4 5

Vielen Dank!
**E: ANOVA results**

*Analysis of Variance for service sector sample*

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>F</th>
<th>η</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational Leadership</td>
<td>27</td>
<td>1.7</td>
<td>.06</td>
<td>.21</td>
</tr>
<tr>
<td>Transactional Leadership</td>
<td>27</td>
<td>.51</td>
<td>.02</td>
<td>.48</td>
</tr>
<tr>
<td>Proactivity</td>
<td>23</td>
<td>6.3**</td>
<td>.21</td>
<td>.01</td>
</tr>
<tr>
<td>Value congruence</td>
<td>27</td>
<td>3.5**</td>
<td>.11</td>
<td>.01</td>
</tr>
<tr>
<td>Affective organizational commitment</td>
<td>23</td>
<td>.08</td>
<td>.01</td>
<td>.78</td>
</tr>
<tr>
<td>Calculative organizational commitment</td>
<td>23</td>
<td>.45</td>
<td>.02</td>
<td>.51</td>
</tr>
<tr>
<td>Normative organizational commitment</td>
<td>23</td>
<td>.23</td>
<td>.01</td>
<td>.63</td>
</tr>
<tr>
<td>Affective commitment towards the job</td>
<td>23</td>
<td>2.3</td>
<td>.01</td>
<td>.15</td>
</tr>
<tr>
<td>Calculative commitment towards the job</td>
<td>22</td>
<td>2.2</td>
<td>.03</td>
<td>.15</td>
</tr>
<tr>
<td>Normative commitment towards the job</td>
<td>23</td>
<td>1.1</td>
<td>.05</td>
<td>.30</td>
</tr>
</tbody>
</table>

*note:*
* p < .05, ** p < .01
## Analysis of Variance for education sector sample

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>F</th>
<th>η</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational Leadership</td>
<td>54</td>
<td>7.63*</td>
<td>.12</td>
<td>.01</td>
</tr>
<tr>
<td>Transactional Leadership</td>
<td>54</td>
<td>1.23</td>
<td>.02</td>
<td>.27</td>
</tr>
<tr>
<td>Proactivity</td>
<td>42</td>
<td>1.56</td>
<td>.04</td>
<td>.22</td>
</tr>
<tr>
<td>Value congruence</td>
<td>54</td>
<td>2.83</td>
<td>.05</td>
<td>.10</td>
</tr>
<tr>
<td>Affective organizational commitment</td>
<td>41</td>
<td>.32</td>
<td>.01</td>
<td>.58</td>
</tr>
<tr>
<td>Calculative organizational commitment</td>
<td>41</td>
<td>12.03*</td>
<td>.23</td>
<td>.01</td>
</tr>
<tr>
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<td>41</td>
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<td>.85</td>
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</tbody>
</table>

*note:*  
* p < .05; ** p < .01
Zusammenfassung


Es wurde ein quasi-experimentelles Kontrollgruppen-Design mit einer Vorher / Nachher Messung verwendet. Das zweitägige Training zur transformationalen Führung bestand aus einem Trainingstag, an dem unter anderem Grundlagen der Führung vermittelt wurden und einem Coachingtag, an dem nach der Methode des Kollegialen Team-Coachings das Gelernte vertieft werden konnte. Es wurde ein 360° Feedback vor und nach dem Training mit den Führungskräften und den Einschätzungen ihrer Mitarbeiter, Kollegen und Vorgesetzten durchgeführt. Neben der transformationalen Führung der Teilnehmer (Selbst- und Fremdeinschätzung) wurde die Wertekongruenz zwischen den Vorgesetzten (Fremdeinschätzung) und ihren Mitarbeitern, das normative, affektive und kalkulatorische Commitment (Selbsteinschätzung) der Teilnehmer und die Proaktivität der Teilnehmer (Selbsteinschätzung) erhoben.


erreicht werden um varianzanalytische Berechnungen stärker zu ermöglichen. Das quasi-experimentelle Design ist ein Kritikpunkt: In weiteren Forschungen sollte z.B. eine randomisierte Zuteilung der Führungskräfte auf die Kontroll- und Experimentalgruppen erfolgen. Ebenso wäre es interessant zu überprüfen, ob die reine Durchführung des 360° MLQ-Feedbacks einen großen Effekt auf die Führungskräfte hat.
Lebenslauf


Während des Studiums war ich als studentische Hilfskraft am Lehrstuhl für Sozialpsychologie des Instituts IV (Prof. Dr. U. Piontkowski), als studentische Hilfskraft am Lehrstuhl für Allgemeine und Angewandte Psychologie des Instituts II (Prof. Dr. W. Hell) und als Assistent der Personalentwicklung bei einem mittelständischen Dienstleistungsunternehmen in Osnabrück beschäftigt.

Im Anschluss an meinen Studienabschluss war ich ab Juni 2005 als wissenschaftlicher Angestellter am Lehrstuhl für Arbeits- und Organisationspsychologie (Prof. Dr. N. Schaeper) der Universität Paderborn angestellt. Zeitgleich begann ich mit der Promotion am Lehrstuhl für Allgemeine und Angewandte Psychologie des Instituts II (Prof. Dr. W. Hell) der Westfälischen Wilhelms-Universität Münster.

Münster, im Juni 2008

Jens Radstaak