Ethical leadership: through the eyes of employees

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Citation for published version (APA):
Kalshoven, K. (2010). Ethical leadership: through the eyes of employees.
Chapter 2

Ethical Leadership at Work Questionnaire (ELW):
Development and Validation of a Multidimensional Measure

Abstract
This paper describes the development and validation of the multidimensional Ethical Leadership at Work (ELW) questionnaire. Based on theory, interviews and a student sample, we developed seven ethical leader behaviors (fairness, integrity, ethical guidance, people orientation, power sharing, role clarification, and concern for sustainability). We then tested the factor structure in two employee samples (first common-source, EFA; next multi-source, CFA). To establish construct validity we related ethical leader behaviors to other leadership styles and employee attitudes in Study 1. The expected pattern of relationships emerged, e.g., positive relationships with satisfaction and commitment, and negative ones with cynicism. The results suggest that the ELW scales have sound psychometric properties and good construct validity. In Study 2, using a multi-source sample, the ELW behaviors explained variance in trust, OCB, and leader and follower effectiveness beyond a uni-dimensional measure of ethical leadership. Ethical leadership was also related to OCB (supervisor-rated). Employees who rate their leader higher on power sharing and fairness show more OCB. Taken together, the results suggest the ELW is a useful new measurement tool that can help further our understanding of the antecedents and consequences of ethical leadership. 1

Introduction

Recent fraud scandals have put ethical leader behavior high on the priority list of organizations as ethical problems break down the trust and reputation of both leaders and organizations (Mendonca, 2001; Waldman, Siegel, & Javidan, 2006). Ethical leadership is expected to have positive effects on the attitudes and (ethical) conduct of employees and ultimately even on business unit or organizational performance (Aronson, 2001; Brown, Treviño, & Harrison, 2005; Kanungo, 2001; Treviño, Brown, & Hartman, 2003).

Research on ethical leader behavior at all levels in the organization is increasing. Ethical leadership is often seen as a multi-dimensional concept, yet with a few exceptions (e.g., De Hoogh & Den Hartog, 2008; 2009a; Resick, Hanges, Dickson, & Mitchelson, 2006), previous studies have not measured multiple ethical leader behaviors. Rather, uni-dimensional measures tend to be used. For instance, Brown and colleagues (2005) developed the 10-item Ethical Leadership Scale (ELS) that is currently often used to measure ethical leader behavior. This scale combines different leader behaviors, including acting fairly and honestly, allowing followers’ voice, and rewarding ethical conduct in a single scale. Although such a short scale is useful for certain research purposes, theoretically the underlying behaviors seem rather different and they may have different antecedents and consequences. Combining such different behaviors into a single undifferentiated construct could make it harder to uncover the different mechanisms through which ethical leadership develops and may be effective.

In a newly emerging research field, developing valid measures is of great importance. Here, we aim to contribute to the emerging field of ethical leader behavior through developing a questionnaire to measure different forms of ethical leader behavior (the Ethical Leadership at Work Questionnaire [ELW]). Drawing on a literature review, we distinguish seven ethical leader behaviors. In Study 1, we first describe the item generation and scale development process based on interviews and a pilot study. Next, we investigate the ELW factor structure and measurement properties in a single-source employee sample. To start establishing construct validity, we examine relationships of the ethical leader behaviors with transformational leadership and work-related attitudes. Specifically, we look at perceived leader effectiveness, job and leader satisfaction, trust, cynicism and commitment.
In Study 2, we retest the factor structure and psychometric properties of the ELW scales and further address construct validity by examining the relationship between ethical leader behaviors and perceived leader effectiveness, trust, employee effectiveness and employee organizational citizenship behavior in a multi-source sample. In this multi-source field study, we also contribute to the literature by examining the extent to which the ethical leadership behaviors explain variance in employee behavior (Study 2).

**Ethical Leader Behavior**

In the last few years, ethics and integrity have received a growing amount of attention in the leadership field. Both transformational and authentic leadership have been described as containing an ethical component. Related to this, Craig and Gustafson (1998) developed a leader integrity measure that focused more on the negative rather than the positive side of integrity. Integrity shows some conceptual overlap with ethical leadership, yet is only one element of ethical behavior (e.g., Palanski & Yammarino, 2007). Bass (1985) argued that transformational leaders could behave either ethically or unethically and distinguish between authentic (i.e., ethical) transformational and pseudo (i.e., unethical) transformational leadership (Barling, Christie, & Turner, 2008; Bass & Steidlmeier, 1999). Pseudo-transformational leaders have motives or intentions that are not legitimate and aim for undesirable goals. Authenticity, on the other hand, functions as a moral compass emphasizes serving the organization (Bass & Steidlmeier, 1999). Distinguishing between authentic and pseudo transformational leadership is complicated for followers according to Dasborough and Ashkansy (2002) as the behaviors shown by these two types of transformational leaders are the same, only their intentions vary. A similar distinction is made between socialized and personalized charismatic leadership based on whether leaders act on socialized or personalized power motives (Howell & Avolio, 1992). Price (2003) points out that egoism or personalized motives may not form the only reason why leaders behave unethically. Leaders may, for instance, also behave unethically because (altruistic) values or actions based on (altruistic) values can be inconsistent. To sum up, transformational leadership can be unethical if the motivation is selfish (Bass, 1998), power is misused (McClelland, 1975) or if values do not guide behaviors sufficiently (Price, 2003).
Authentic leadership is another form of leadership, which some argue has an ethical element (e.g., Avolio, & Gardner, 2005; May, Chan, Hodges, & Avolio, 2003). However, others do not see morality as a necessary component of authentic leadership (e.g., Shamir, & Eilam, 2005; Sparrowe, 2005). Authentic leadership is described as behaving in line with the true self and to know oneself (e.g., Gardner, Avolio, Luthans, May, & Walumbwa, 2005; May, et al., 2003; Sparrowe, 2005). Walumbwa et al. (2008) empirically showed that Brown et al.’s measure of ethical leadership is related, but well distinguishable from authentic leadership. One distinction is that ethical leaders also use transactional forms of leadership and authentic leaders don’t. In other words, ethical leaders discipline and reward (un)ethical behaviors, which is less in line with authentic leadership (Brown et al., 2005; Walumbwa et al., 2008).

Researchers have also started to consider ethical leadership as a set of behaviors or a separate leadership style in itself rather than focusing only on the ethical components of other leadership styles (Brown et al., 2005; De Hoogh & Den Hartog, 2008; 2009a; Kanungo, 2001). The fundamentals of ethics according to the Webster dictionary are dealing with what is good and bad, moral duty and moral obligation. This relates closely to how Kanungo (2001) conceptualizes ethical leadership. He takes an altruism approach and addresses ethical leadership as a tension between altruistic and egoistic motives (e.g., Kanungo, 2001; Turner, Barling, Epitropaki, Butcher, & Milner, 2002). This approach suggests that an ethical leader is driven by a system of accepted beliefs and appropriate judgments rather than self-interest, which is beneficial for followers, organizations and society. This way, Kanungo (2001) and Aronson (2001) emphasize the effect of leader’s actions on others as a major concern in ethical leadership.

Brown and colleagues (2005) take ethical leadership as a separate style a step further and define ethical leadership as: “the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships and the promotion of such conduct to followers through two-way communication, reinforcement and decision-making” (p. 120). Ethical leaders act as role models of appropriate behavior and use reward and punishment to stimulate ethical conduct (Brown et al., 2005; Treviño et al., 2003). Brown et al. (2005) address ethical leadership from a social learning perspective and suggest that
followers will come to behave similar to their leader through imitation and observational learning (cf., Bandura, 1986).

In addition to this social learning approach, others view ethical leadership from a social exchange approach (e.g., Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009; Turner et al., 2002). Researchers using a social exchange approach focus more on the norm for reciprocity (Cropanzano & Mitchell, 2005) and hold that followers are willing to reciprocate when treated fairly and with concern by their leaders (e.g., Mayer et al., 2009). Both views help understand individuals’ reactions to ethical leader behavior. Other perspectives on ethical leadership are also found. For example, Dickson, Smith, Grojean and Ehrhart (2001) focus on the role leaders have in creating an ethical climate and Resick and colleagues (2006) focus on how leaders use their power in decisions and actions. Similarly, De Hoogh and Den Hartog (2009a) emphasize ethical leaders’ socially responsible use of power and see ethical leadership as the process of influencing in a social responsible way others’ activities toward goal achievement.

Although Brown and colleagues (2005) suggest a uni-dimensional measure of ethical leader behavior, both Resick et al. (2006) and De Hoogh and Den Hartog (2008) have started to investigate ethical leadership as a multi-dimensional construct. Different leader behaviors have been suggested to be part of ethical leadership, including acting fairly, demonstrating consistency and integrity, promoting ethical conduct, being concerned for people, allowing followers’ voice, and sharing power (Brown et al., 2005; De Hoogh & Den Hartog, 2008; 2009a; Den Hartog & De Hoogh, 2009). De Hoogh and Den Hartog (2009a) argue that ethical leader behavior is multidimensional, and as different ethical leader behaviors are theoretically rather different, they may have different antecedents and consequences. They suggest measuring such dimensions separately is important. Thus, ethical leader behavior may be regarded as an overarching construct composed of multiple distinct, yet related leader behaviors. However, previous research has not developed or validated a measure that differentiates between such behaviors. As with other leadership styles (e.g., transactional, transformational, servant), the identification and empirical support for multiple dimensions increases our comprehension of both the leadership style itself and the relationships such a style has with employee attitudes and conducts.
Ethical Leader Behavior Dimensions

A review of the ethical leadership literature suggests several behavioral dimensions of ethical leadership in organizations. We build on work by Brown and Treviño as well as several others in the field as theoretical bases for distinguishing these behaviors. De Hoogh and Den Hartog (2008) distinguished three dimensions of ethical leadership (i.e., fairness, power sharing, and role clarification) and related the content of these dimensions to Brown et al. (2005). In addition to fairness, power sharing and role clarification, we also include people oriented behavior, integrity, ethical guidance, and concern for sustainability in our measure as these are behaviors found in the ethical leader behavior literature (see below).

Based on De Hoogh and Den Hartog (2008), the first three dimensions we included were fairness, power sharing and role clarification. These behaviors are also reflected in the work by Brown et al (2005). First, fairness is seen as an important form of ethical leader behavior. Ethical leaders act with integrity and treat others fairly. They make principled and fair choices, are trustworthy and honest, do not practice favoritism, and take responsibility for their own actions (Brown et al., 2005; De Hoogh & Den Hartog, 2008; Treviño et al., 2003). Second, power sharing is also seen as an ethical leader behavior. De Hoogh and Den Hartog (2009a) argue that ethical leaders allow subordinates a say in decision making and listen to their ideas and concerns and Resick et al. (2006) argue for an empowering aspect of ethical leadership. Similarly, Brown et al. (2005) suggest ethical leaders provide followers with voice. Sharing power allows subordinates more control and makes them less dependent on their leaders (Yukl, 2006). Third, ethical leaders are transparent and engage in open communication (Brown et al., 2005). In line with this, De Hoogh and Den Hartog (2008) point to the importance of transparency in clarifying performance goals and expectations and distinguish role clarification as a component of ethical leadership. Ethical leaders clarify responsibilities, expectations, and performance goals, so that subordinates’ know what is expected from them and understand when their performance is up to par. Subordinates do not worry unnecessarily about unclear expectations and know how they can meaningfully contribute to meeting the unit’s or organization’s goals.

Theoretical work also suggests additional ethical leader behaviors. An important one is people orientation or having a true concern for people. This was one of the most
frequently mentioned parts of ethical leadership in Treviño et al.’s (2003) qualitative study. Resick et al. (2006) also describe ethical leaders as people-oriented. The people orientation component in ethical leadership reflects genuinely caring about, respecting, and supporting subordinates and where possible ensuring their needs are met (Kanungo & Conger, 1993; Treviño et al., 2003).

Next, Treviño et al. (2003) argue that ethical leaders clearly convey standards regarding ethical conduct. Organizations and top management set rules, standards and codes of conduct, which provide guidelines for ethical behavior (Beu & Buckley, 2001) and leaders can raise subordinates’ awareness of such guidelines. Ethical leaders also use rewards and punishments to hold subordinates responsible for their actions (Treviño et al., 2003). According to Brown and colleagues (2005), ethical leaders guide followers in setting priorities and in ethical dilemmas they experience. We label this ethical guidance, which implies communication about ethics, explanation of ethical rules, and promotion and reward of ethical conduct among subordinates.

Treviño et al.’s (2003) qualitative study also suggests that ethical leaders are characterized by a broad ethical awareness. Ethical awareness implies such leaders are concerned about (the impact on) stakeholders and society. A stakeholder perspective suggests ethical leaders have a responsibility to protect and promote the interests of their stakeholders (Donaldson & Preston, 1995). In line with this, Kanungo and Mendonca (1996) argue that ethical leaders take the effects of their behavior on the surroundings into account, including the society and environment. The importance of a broader view on others in the firm and society as well as on the natural environment is also found in the corporate social responsibility literature (e.g., Waldman et al., 2006). A somewhat related research field on sustainable leadership is emerging. For example, Hargeaves and Fink (2004) developed a theoretical view on sustainable leadership for the educational sector. They suggest sustainability entails focusing on the development of others in the environment, distribution of responsibilities, and endurance over time (Hargeaves & Fink, 2004; 2006). Ferdig (2007) takes a responsibility point of view and argues that sustainable leaders act beyond their self-interests. However, so far research on ethical leader behavior within firms has not incorporated the potential importance of environmental or society responsibility. Here, we include
environment orientation as an ethical leader behavior. This encompasses leaders’ paying attention to sustainability issues, considering the impact of their actions beyond the scope of their own workgroup, and demonstrating care about the welfare of the society.

Finally, we distinguish integrity based on the behavioral integrity literature. Integrity behaviors are described as word-deed alignment or the extent to which what one says is in line with what one does (e.g., Dineen, Lewicki, & Tomlinson, 2006; Palanski & Yammarino, 2007, 2009). Leaders who keep promises and behave consistently can be trusted or believed because they work or behave as expected (Simons, 2002). Similarly, Yukl (2006) describes leaders as being ethical when they keep promises and behave consistently. Thus, ethical leaders keep their promises and act consistently, in a predictable way, which we label integrity. Table 1 depicts an overview of the ethical leadership at work (ELW) dimensions.

To summarize, we distinguish seven ethical leader behaviors: fairness, people orientation, role clarification, ethical guidance, environment orientation, power sharing and integrity. We performed multiple cross-sectional field studies. In study 1, we first use interviews and a student sample to see whether other or additional behaviors emerge and

<table>
<thead>
<tr>
<th>ELW dimensions</th>
<th>Descriptions</th>
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<tbody>
<tr>
<td>Fairness</td>
<td>Do not practice favoritism, treat others in a way that is right and equal, make principled and fair choices</td>
</tr>
<tr>
<td>Power sharing</td>
<td>Allow followers a say in decision making and listen to their ideas and concerns</td>
</tr>
<tr>
<td>Role clarification</td>
<td>Clarify responsibilities, expectations and performance goals</td>
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<tr>
<td>People orientation</td>
<td>Care about, respect and support followers</td>
</tr>
<tr>
<td>Integrity</td>
<td>Consistence of words and acts, keep promises</td>
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<tr>
<td>Ethical guidance</td>
<td>Communicate about ethics, explain ethical rules, promote and reward ethical conduct</td>
</tr>
<tr>
<td>Concern for sustainability</td>
<td>Care about the environment and stimulate recycling</td>
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to develop the ethical leadership at work (ELW) questionnaire. Next, in a single-source subordinate sample, we test the factor structure and construct validity by relating the ELW behaviors to other leadership styles and attitudes. In study 2, we gathered multi-source data from subordinate – leader dyads to further test the ELW factor structure and relate the ethical leader behaviors to employees’ organizational citizenship behavior (OCB) and effectiveness.

**Study 1**

To investigate the validity of ethical leader behaviors as measured with the ELW we included variables that have previously been investigated in relation to ethical leadership (see Table 2). Brown et al. (2005) showed that ethical leadership relates to leader effectiveness, trust, satisfaction with the leader and transformational leadership. In addition, Den Hartog and De Hoogh (2009) found a relationship between ethical leadership and commitment. Furthermore, in line with Brown et al. (2005) we included age and gender to investigate discriminant validity. In line with previous research on ethical leadership we chose different variables to start testing construct validity. Although no empirical evidence is available linking ethical leader behaviors to employees OCB, effectiveness, transactional and autocratic leadership, theory and related research support such relationships. For example, Brown et al. argue ethical leaders can act transactionally, yet do not test this relationship empirically. Finally, we included cynicism to also investigate a negative employee attitude rather than only positive ones in relation to the ELW. Table 2 summarizes the expected relationships.

**Ethical Leadership and Other Leadership Styles**

A review of the literature reveals some conceptual overlap as well as notable distinctions between perceived ethical leadership and other leadership styles (e.g., Brown et al., 2005). To test convergent validity, we thus included measures of related leadership styles (i.e., overall ethical, transformational and transactional leadership). We expect ELW behaviors to correlate positively with other ethical leadership measures (here we use the ELS scale developed by Brown et al., 2005). Brown and colleagues (2005) also report that ethical and transformational leadership show conceptual overlap. In their study, they
investigated one facet of transformational leadership (i.e., idealized influence) in relation to ethical leadership and concluded that these constructs were related yet distinct. In line with this, Turner et al. (2002) found that high leader moral reasoning (rated by leader) was related to transformational leadership (rated by subordinate). Also, Rowold (in press) found that perceptions of transformational leadership were related to perceived moral-based leadership. However, Price (2003) argues that transformational leaders can also behave unethically. For example, such leaders may pursue self- rather than collective interests.

Transactional leaders motivate followers through rewards, promises, feedback or disciplinary actions (Burns, 1978). Brown et al. (2005) suggest that ethical leadership has a transactional component as ethical leaders set clear ethical standards and hold followers accountable for acting according to these standards by using rewards and discipline. Simi-

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<tr>
<th>Construct</th>
<th>Predictions</th>
<th>Findings</th>
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<tr>
<td><strong>Discriminant validity</strong></td>
<td></td>
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</tr>
<tr>
<td>Age</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Gender</td>
<td>0</td>
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<tr>
<td>Autocratic leadership</td>
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<tr>
<td><strong>Convergent validity</strong></td>
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<tr>
<td>Transformational and transactional leadership</td>
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<td>+</td>
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<tr>
<td>Ethical leadership scale</td>
<td>+</td>
<td>+</td>
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<tr>
<td>Passive leadership</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Leader effectiveness</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Trust</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Job and leader satisfaction</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Organizational and team commitment</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Cynicism</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Employee effectiveness 1</td>
<td>+/-0</td>
<td>+/-0</td>
</tr>
<tr>
<td>Organizational citizenship behavior 1</td>
<td>+</td>
<td>+/-0</td>
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Note: + positive relationship hypothesized, - negative relationship hypothesized, 0 no relationship hypothesized.

1) variables measured in study 2.
larly, Rowold (in press) describes the ethical component of transactional leadership in terms of communication about goals and fair negotiation about rewards. If transactions between leader and follower are well-defined they provide a foundation for knowledge-based trust and fairness. Consistent with Path-Goal theory, ethical leaders help subordinates figure out how to achieve personal goals in such a way that organizational goals are also met, while maintaining high ethical standards (House, 1996). However, Bass and Steidlmeier (1999) argue that transactional leaders are usually typified as having selfish motives. Overall, ethical leaders may use both transformational and transactional behaviors and partial theoretical overlap exists between these styles (e.g., Brown et al., 2005). We thus expect dimensions of ethical leadership to be positively related to transformational and transactional leadership, while also being empirically distinct.

To be able to demonstrate divergent validity we included other leadership styles that we expected would be non- or negatively related (i.e., passive and autocratic leadership) (Nunnally & Bernstein, 1994). Autocratic leaders make decisions without considering the opinions of employees. They give orders and fostering dependency. Employees have no influence in decision making, reflecting a lack of employee empowerment (Yukl, 2006). In contrast, ethical leaders are concerned about their followers, behave fairly, and share power. This implies ethical leaders are likely to accept and encourage their employees’ participation. Thus, we expect that autocratic leadership is negatively related to the different ethical leader behaviors.

We also relate ethical leadership to passive leadership (i.e., a combination of laissez-faire leadership and passive management-by-exception, cf. Den Hartog, Van Muijen, & Koopman, 1997). Passive leaders put a minimal amount of effort to get required work done, avoid problems and involvement, come into action when problems are already urgent, and do not meet their responsibilities or duties (Bass, 1985; Den Hartog et al., 1997). Einarsen, Aasland and Skogstad (2007) hold that passive leaders violate legitimate involvement in the organization, as they waste time, are unmotivated and fail to support or guide their followers. They conclude that passive leadership is a form of destructive leadership. Thus, we propose that passive leadership is negatively related to ethical leader behaviors. We hypothesize:
Hypothesis 1: Ethical leadership behaviors are positively related to transformational and transactional leadership and negatively related to autocratic and passive leadership.

Ethical Leadership and Subordinates’ Attitudes

So far, the results of research on the correlates and effects of ethical leadership mainly demonstrate positive relationships with a variety of followers’ attitudes, such as satisfaction with the leader, trust in management and perceived leader effectiveness (e.g., Aronson, 2001; Brown et al., 2005; Den Hartog & De Hoogh, 2009; Kanungo, 2001). To assess criterion-related validity for our multidimensional measure, we examined relationships with employee attitudes. We included attitudes which have empirically been shown to relate to ethical leadership in previous studies such as perceived leader effectiveness, trust in management, job and leader satisfaction, and team and organizational commitment. We expect a positive relationship between ethical leader behaviors and these variables. For example, ethical leaders promote altruistic attitudes among followers through role modeling and open communication which enhances identification and commitment. Also, employees who feel supported, cared for and fairly treated are more likely to develop satisfaction and trust (cf., Brown et al., 2005; De Hoogh & Den Hartog, 2008). We also included cynicism. We expect a negative relationship between ethical leader behaviors and cynicism. Previous research showed that poor communication and unfair interpersonal treatment were related to employee cynicism (Anderson, 1996). Treadway et al. (2004) showed that trust and organizational support are important to decrease cynicism. In line with this, we expect ethical leadership which implies treating subordinates in a fair, open, and supportive way results in positive rather than cynical employee attitudes. Thus, we hypothesize:

Hypothesis 2: Ethical leader behaviors are positively related to perceived leader effectiveness, trust in management, job and leader satisfaction, and team and organizational commitment and negatively related to cynicism.

Method Study 1

Item and scale development. We followed Hinkin’s (1998) recommendations in generating items for the ELW questionnaire. As an item-generation strategy, we obtained
(published) articles and examined them for clear item examples. We also interviewed eight managers and seven employees to generate additional items and to determine whether other or additional dimensions of ethical leadership would emerge. Thus, we combine the inductive and deductive item generation process recommended by Hinkin. The interview sample was diverse in terms of age (managers’ age ranged from 27 to 55; employees’ age from 24 to 53) and 43 % of the managers and 50 % of the employees were male. Participants were asked what they consider as (un)ethical behavior at work and examples of their own experiences with (un)ethical behavior of their leaders or employees. Participants’ descriptions of ethical leader behaviors were coded on content and included fairness, people orientation, role clarification, power sharing, integrity and ethical guidance. Some also specifically identified transparency about knowledge and information sharing as part of ethical leadership and mentioned that ethical leaders share their competence, knowledge and information with subordinates. Although this theoretically overlapped with role clarification and power sharing, we added knowledge and information sharing to the seven literature-based behaviors and generated several items to test whether it would emerge separately or not.

In total, 90 ethical leader behavior items were generated from three sources: quotes from the interviews (23 items), (adapted) existing items mentioned in the literature (e.g., integrity and ethical climate; 52 items), and items formulated by the researchers (15 items). Item choices and revisions were guided by the definitions of the dimensions of ethical leadership (see Table 1). Most items were positively formulated, yet some items from the existing literature and quotes from the interviews were negatively formulated. Further, most items were adapted to refer to the employee him- or herself. A small number of items refer to colleagues. This was done because ethical leadership is also about social learning and caring about the broader environment and interviewees also explicitly mentioned treatment of others as relevant to ethical leadership.

We started with a rather large set of items to allow removing of items during the development process (cf. Hinkin, 1998). The 90 items were commented on by five colleagues. Next, for content validation, items were judged on content and classified into eight dimensions of ethical leadership by two experts in the leadership field. Misclassifications or comments suggesting ambiguity led to dropping 30 items. Finally, two employees com-
mented extensively on the items. The purpose was to check whether they understood the items and were able to answer the items about their direct supervisor. This helped reword a few ambiguous items.

Pilot test. A pilot test of the 60 remaining items and the eight behavioral dimensions was conducted among business students of a university in the Netherlands ($N = 151$). Students had an average of five ($SD = 3$) years work experience, average age was 21 ($SD = 4$), 45% were male and 66% of their supervisors were male. Principal components analyses confirmed the seven ethical leadership behaviors defined a priori. The information and knowledge sharing items showed high cross loadings with other factors, including fairness (openness items) and role clarification (sharing information on tasks). Knowledge and information sharing thus did not add unique information to the seven identified behaviors and was therefore not included in further development. Items that did not load into their hypothesized factor in the pilot study were also removed or modified (as suggested by Hinkin, 1998). This led us to drop four more items.

The ELW scale development process resulted in 46 items, with fairness having 10, power sharing 6, role clarification 5, people orientation 7, environment orientation 6, ethical guidance 8 and integrity 4 items. They formed a mix of previously existing items from literature (43%), adapted items (12%), and new items (45%). The order of the items in the questionnaire was randomized to avoid bias in further factor analyses.

Sample and procedure. Study 1 was conducted among a broad sample of employees in the Netherlands. Data collection followed a “snowball” procedure (inviting contacts and asking them to invite their contacts) to create a diverse sample in terms of sectors, jobs and hierarchical levels. Surveys were distributed online or by email. Participation was voluntary. As an incentive an overall report was offered to participants upon completion of the study. Two weeks after the launch of the study everyone originally contacted to participate received an email-reminder. In total, 158 people completed the online version and 85 people the email version of the questionnaire. The final sample consisted of 243 participants, 17 of these were excluded as they only filled out part of the questionnaire. The sample size meets Hinkin’s (1998) recommendation for scale development (i.e., a minimum of 150 participants). Participants’ average age was 36 years ($SD = 11$); 83 males and 127 females
participated (16 did not report gender). Of the participants’ supervisors, 44 % were male (18 did not report gender). Participants worked in health care, government, financial and business services, education, or manufacturing. The majority ($N = 150$) held a college or university degree. Leader-employee tenure was over 6 months for 80 % of the sample.

**Measures.** The 46-item ELW was used to measure ethical leadership behaviors. All items were administered in Dutch and the response scale for all leadership and outcome measures (except for leader effectiveness) ranged from 1 (strongly disagree) to 5 (strongly agree). For construct validation, ethical leadership was also measured with the uni-dimensional 10-item ELS developed by Brown et al. (2005). CFA’s showed that the one-factor model of the ELS also best fit our data (it is beyond our scope to fully present the results of these CFA’s for the ELS scale; they are available from the authors). A sample ELS item is: "Listens to what employees have to say". Cronbach’s $\alpha$ was .90. As the ELW and ELS reflect a similar content, we expect that ELW scales are relatively highly correlated with the ELS. The only possible exception is our scale for environment orientation. As this aspect is not included in the ELS operationalization of ethical leadership, we expect a somewhat less strong relationship there.

Transformational, transactional, autocratic and passive leadership were assessed by the Dutch validated Charismatic Leadership in Organizations (CLIO) scale (De Hoogh et al., 2004). A sample item for transformational leadership (11 items) is: "Encourages subordinates to be independent thinkers". The CLIO operationalization of transactional leadership (6 items) emphasizes offering subordinates a fair deal (cf. House, 1996). A sample item is: "Does not criticize subordinates without good reason". Autocratic and passive leadership were both assessed with six items. Sample items are respectively: "Keeps control and takes charge when the going gets tough" and "Things have to go wrong for him/her to take action". Cronbach’s $\alpha$ for transformational was .92, for transactional .86, for autocratic .72, and for passive leadership .66.

Team and organizational commitment scales were adapted from Ellemers, De Gilder and Van den Heuvel (1998). The nine item version was used (see also Liden, Wayne, Kraimer, & Sparrowe, 2003). A sample item is: "This organization has a great deal of personal meaning for me". Cronbach’s $\alpha$ for organizational commitment was .87 and for team commitment .69.
Trust in management was assessed by a 6-item scale based on Cook and Wall (1981). A sample item is: "Management can be trusted to make sensible decisions for the firm’s future". Cronbach’s α was .76. Cynicism was assessed by the 7-item scale from Cole, Bruch and Vogel (2006). A sample item is: "There is a cynical atmosphere in my work group". Cronbach’s α was .84. Respondents indicated how satisfied they were with their job on one item: "Overall, how satisfied are you with your job?" Respondents also indicated how satisfied they were with their leader and how effective their leader is. Both were assessed by two items from the MLQ (e.g., Bass & Avolio, 1993). A sample of leader satisfaction is: "In all, how satisfied are you with your supervisor?" and for leader effectiveness is: "How effective is the person you are evaluating as a leader?" Responses scale ranged from 1 (not at all) to 5 (very much so).

**Results Study 1**

For construct validity, principal component factor analysis (PCA) was performed with Oblimin rotation on the 46 ethical leadership items. The factor correlation matrix showed correlations above .32 implying that factors are related and Oblimin rotation is warranted (Tabachnick & Fidell, 2007). Seven factors explained a total of 70 % of the variance, exceeding the minimum acceptable target of 60 % for scale development (Hinkin, 1998). Less well interpretable solutions were the three, six and eight factor solutions. The seven factor solution reflects the a priori factors we distinguished. Table 3 reports the factor loadings. The a priori factor for environment orientation was a broadly defined dimension focusing on sustainability and society. Only the sustainability items, however, clustered together and represented one factor. Therefore the factor will be further referred to as "concern for sustainability". The other three items of the original scale concerned with caring about the welfare of the society did not load on any factor. As a result, these items were removed from further analysis. Another five items from other factors had loadings below .30 and were discarded. Thus, the final ethical leadership dimensions are: Fairness, Integrity, People orientation, Role clarification, Power sharing, Ethical guidance and Concern for sustainability, and the adapted instrument contains 38 items.

The ELW scales show good variability and high reliabilities. Table 4 reports the descriptive statistics, correlations and Cronbach’s α for the scales. All reliabilities of the ELW
scales are above .80. Nunnally argues that in early stages of research an alpha of .70 is sufficient, especially because the construct being measured is not used for selection or decision purposes yet (1978, p.245). As anticipated, the inter-correlations among the ethical leadership dimensions of the ELW are moderate (ranging from $r = .36$ to $r = .68$). Concern for sustainability has somewhat lower correlations with the other dimensions (between $r = .26$ and $r = .51$). The inter-correlations are comparable with those between dimensions of other leadership style measures (see e.g., Liden, Wayne, Zhao, & Henderson, 2008).

To further assess construct validity, we investigated the correlations between the ELW scales and the ELS. As expected, the ELS is significantly and positively correlated with the seven ELW behaviors, ranging from $r = .51$ to $r = .79$ (see Table 4). These correlations imply that the ELS and the ELW measure similar yet not identical constructs, supporting construct validity of the ELW. As expected, the lowest correlation between ELS and ELW was found for concern for sustainability, because concern for sustainability is not included in the operationalization of the ELS ($r = .51, p < .05$). To further demonstrate that the seven ELW subscales are empirically distinct from the ELS, we performed a Confirmatory Factor Analysis that included the 38 ELW items and the 10 ELS items to show that none of the ELW subscales fully overlap with the ELS. A good fit is seen for the eight-factor model (seven ELW factors and one ELS factor), $\chi^2 (1052, N = 204) = 1892.8, p < .01$, CFI = .98; NNFI = .98; RMSEA = .06; SRMR = .06 (cf. Hu & Bentler, 1999). Thus, results support the distinction between the subscales of the ELW and the ELS.

In line with hypothesis 1, all ethical leader behaviors were positively correlated with both transformational (ranging from $r = .25$ to $r = .68$) and transactional leadership (ranging from $r = .26$ to $r = .82$). Passive leadership was negatively and significantly correlated with the ethical behaviors (ranging from $r = -.24$ to $r = -.53$), also in line with hypothesis 1. Autocratic leadership had negative or non-significant correlations with ethical leader behaviors (ranging from $r = -.53$ to $r = .14$), partly in line with hypothesis 1. In line with hypothesis 2, all ethical leader behaviors were positively and significantly correlated with perceived leader effectiveness (ranging from $r = .35$ to $r = .65$), leader satisfaction (ranging from $r = .40$ to $r = .76$), team commitment (ranging from $r = .15$ to $r = .31$), organizational commitment (ranging from $r = .15$ to $r = .32$), and trust (ranging from $r = .22$ to $r = .71$),
Table 3 - Factor analyses of a priory ELW scales; employee sample study 1

<table>
<thead>
<tr>
<th>Factor names and items</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
<th>Factor 6</th>
<th>Factor 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>People orientation</td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>is interested in how I feel and how I am doing</td>
<td>.84</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>takes time for personal contact</td>
<td>.78</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>pays attention to my personal needs</td>
<td>.76</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>takes time to talk about work-related emotions</td>
<td>.76</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>is genuinely concerned about my personal development</td>
<td>.71</td>
<td></td>
<td></td>
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<tr>
<td>sympathizes with me when I have problems</td>
<td>.68</td>
<td></td>
<td></td>
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<tr>
<td>cares about his/her followers</td>
<td>.61</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Fairness</td>
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<td></td>
</tr>
<tr>
<td>holds me accountable for problems over which I have no control</td>
<td>.77</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>holds me responsible for work that I have no control</td>
<td>.77</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>holds me responsible for things that are not my fault</td>
<td>.70</td>
<td></td>
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<tr>
<td>pursues his/her own success at the expense of others</td>
<td>.69</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>is focused mainly on reaching his/her own goals</td>
<td>.62</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>manipulates subordinates</td>
<td>.60</td>
<td></td>
<td></td>
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<tr>
<td>Power sharing</td>
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<tr>
<td>allows subordinates to influence critical decisions</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>does not allow others to participate in decision making</td>
<td>.72</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>seeks advice from subordinates concerning organizational strategy</td>
<td>.69</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>will reconsider decisions on the basis of recommendations by those who report to him/her</td>
<td>.68</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>delegates challenging responsibilities to subordinates</td>
<td>.38</td>
<td>.34</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>permits me to play a key role in setting my own performance goals</td>
<td>.30</td>
<td></td>
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</tbody>
</table>
### Concern for sustainability

- would like to work in an environmentally friendly manner $^h$  
  $r = 0.86$
- shows concern for sustainability issues $^g$  
  $r = 0.85$
- stimulates recycling of items and materials in our department $^h$  
  $r = 0.73$

### Ethical guidance

- clearly explains integrity related codes of conduct $^h$  
  $r = 0.84$
- explains what is expected from employees in terms of behaving with integrity $^h$  
  $r = 0.78$
- clarifies integrity guidelines $^b$  
  $r = 0.77$
- ensures that employees follow codes of integrity $^h$  
  $r = 0.76$
- clarifies the likely consequences of possible unethical behavior by myself and my colleagues $^e$  
  $r = 0.76$
- stimulates the discussion of integrity issues among employees $^c$  
  $r = 0.65$
- compliments employees who behave according to the integrity guidelines $^e$  
  $r = 0.38$

### Role clarification

- indicates what the performance expectations of each group member are $^b$  
  $r = 0.75$
- explains what is expected of each group member $^b$  
  $r = 0.67$
- explains what is expected of me and my colleagues $^b$  
  $r = 0.66$
- clarifies priorities $^b$  
  $r = 0.58$
- clarifies who is responsible for what $^b$  
  $r = 0.54$

### Integrity

- keeps his/her promises $^g$  
  $r = 0.82$
- can be trusted to do the things he/she says $^g$  
  $r = 0.82$
- can be relied on to honour his/her commitments $^d$  
  $r = 0.80$
- always keeps his/her words $^g$  
  $r = 0.73$

---

Note: $N=226$. Principal component analysis with oblimin rotation. Only coefficients greater than 0.30 are presented.

Taken or adapted from:
- a) Den Hartog & De Hoogh (2009),
- b) De Hoogh & Den Hartog (2008),
- c) Arnaud & Schminke (2006),
- d) House (1998),
- e) Brown et al. (2005),
- f) Craig & Gustafson (1998),
- g) interview,
- h) self-developed.
| Variables                  | M    | SD   | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   |
|---------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| People orientation       | 3.49 | .85  | (.90)|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Power sharing            | 3.40 | .74  | (.84)|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Fairness                 | 3.54 | .82  | (.87)|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Role clarification       | 3.50 | .73  | (.86)|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Integrity                | 3.62 | .90  | (.94)|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Concern sustainability   | 3.02 | .86  | (.84)|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Ethical guidance         | 3.18 | .77  | (.77)|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| ELS                      | 3.45 | .67  | (.85)|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Transformational L.      | 3.62 | .67  | (.86)|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Transactional L.         | 3.64 | .64  | (.86)|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Autocratic L.            | 3.24 | .63  | (.72)|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Passive L.               | 2.79 | .59  | (.66)|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Job satisfaction         | 3.89 | .93  | (.82)|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| L. satisfaction          | 3.47 | .99  | (.58)|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Cynicism                 | 2.45 | .71  | (.76)|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Trust in management      | 3.62 | .64  | (.84)|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Org. commitment          | 3.13 | .88  | (.87)|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Team commitment          | 3.90 | .52  | (.89)|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| L. effectiveness         | 3.03 | .87  | (.85)|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Age                       | 35.8 | 10.38| (.02)|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Gender                    | 1.40 | .49  | (.12)|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

Note: n varies between 208 and 222 due to missing cases for some variables. Cronbach’s alpha coefficients are displayed on the diagonal. 

a) sample size varies from 125 to 136 due to missing cases for some variables and is only based on the internet sample. b) Gender coded 1 = male, 2 = female. 

* correlations are significant at p < .05; ** correlations are significant at p < .01; L = leader or leadership; Org. = organization.
and negatively related to cynicism (ranging from $r = -.24$ to $r = -.51$). To further demonstrate discriminant validity we looked at the correlations of the ELW scales with employees’ age and gender. In line with the results of Brown et al. (2005), both the ELW ethical leader behaviors and the ELS were uncorrelated with employees’ age (ranging from $r = .00$ to $r = .10$, ns) and gender (ranging from $r = -.12$ to $r = -.05$, ns).

Taken together, the results of study 1 support the proposed seven factors of ethical leadership and show good psychometric properties of the ELW scales. As expected, relationships between the seven ethical leader behaviors and the ELS (Brown et al., 2005) as well as measures of transformational and transactional leadership were positive, but not so high as to indicate construct redundancy. In addition, the relationships between ELW scales and outcome variables were in line with expectations and previous studies, supporting construct validity. Although results of study 1 are in line with expectations, the correlations should be interpreted with caution, as they are all based on common source data. However, cross-sectional self-report designs are useful in showing inter-correlations among various perceptions and can provide insights as a first step in organizational research (Spector, 2006). The next step taken in Study 2 was retesting the factor structure and relating the ELW scales to different “outcomes”. We used multi-source ratings to minimize common source bias concerns (see e.g., Podsakoff et al., 2003).

**Study 2**

As stated above, the aim of the first study was to develop the ELW as a valid and reliable multidimensional measure of ethical leader behavior. The next step in the validation process in Study 2 is retesting the factor structure on a different sample using CFA and linking the dimensions of ethical leadership (employee rated) to outcomes, such as trust in the leader (employee rated), leader effectiveness (employee rated), employees’ organizational citizenship behaviors (supervisor rated) and employee effectiveness (supervisor rated). This contributes to the existing literature both by further developing and validating the ELW and by linking ethical leadership to employee behavior. In their review, Brown and Treviño (2006) emphasize the need for research on ethical leadership and employee behaviors. Here
we start to answer their call. Specifically, we address the relationship with organizational citizenship behavior (OCB).

Organizational Citizenship Behavior

So far, most research on ethical leadership focuses on employee attitudes. At the group-level, Mayer et al. (2009) investigated ethical leadership in relation to OCB, but previous research has not yet investigated the relationship between ethical leadership and individual employee conduct. Although empirical evidence is scarce, the literature suggests a positive relationship between ethical leadership and OCB (e.g., Brown & Treviño, 2006). OCBs are discretionary behaviors that promote the effective functioning of the organization. Such behaviors include helping, taking the consequences for others of one's own actions into account, being loyal, and keeping up with internal organizational information (e.g., Organ, 1988; Podsakoff, MacKenzie, Paine, & Bachrach, 2000).

From an ethical perspective, OCB is stimulated by leaders acting as role models. Ethical leaders behave altruistically, are concerned about others and take responsibility. Followers are likely to copy such behaviors and show OCB. More specifically, ethical leaders will encourage appropriate and positive conduct by showing concern for others and stressing the importance of group members’ welfare, stimulating employees to help each other for the good of the group. Erhart and Naumann (2004) argue group norms are developed through communication and interaction. Such norms influence employee behavior. As leaders are the groups’ representative of appropriate behaviors they are likely to set such norms (cf. Platow & van Knippenberg, 2001). The norms of the leaders affect follower behavior by setting the right example and using reward and punishment (Mayer et al., 2009). Social exchange theory also suggests that to reciprocate the valued relationship with their leader, employees will be willing to put forth extra effort (Kamdar, McAllister, & Turban, 2006; Podsakoff et al., 2000). In line with this, Mayer et al. (2009) found a positive relationship between ethical leadership and group-level OCB. Thus, De Hoogh and Den Hartog (2009a) and Brown and Treviño (2006) also suggest a positive relationship between ethical leadership and individual level OCB.

We hypothesize that ethical leadership is generally positively related to employee OCB. More specifically, research suggests that leaders’ fair and consistent treatment of
employees results in OCB (Burke, et al., 2007; Ehrhart, 2004; Organ, 1990). In a meta-analysis, Colquitt, Conlon, Wesson, Porter and Ng (2001) show that fair procedures even more than fair outcomes stimulate OCB. Dineen et al. (2006) found that word-deed alignment related to OCB. Thus, fairness and integrity are expected to be important in relation to OCB. Also, a people orientation enhances a strong social relationship between leader and followers, which likely results in OCB. Followers may copy the leader’s positive and caring treatment (e.g., Cropanzano & Mitchell, 2005). Subordinates experiencing leader support are likely to behave cooperatively (e.g., Podsakoff et al., 2000). In addition, subordinates of leaders who exhibit more power sharing or who feel empowered by leaders are likely to experience more control at work (e.g., Zellars, Tepper, & Duffy, 2002) and more responsibility and involvement (e.g., Spreitzer, 1995), which in turn is likely to enhance their willingness to engage in discretionary behavior such as OCB. Thus, besides fairness and integrity, people orientation and power sharing are also likely to be important in relation to employees’ OCB.

Podsakoff, Mackenzie and Bommer (1996) found that subordinates with transactional leaders are likely to engage in OCB. Ethical leaders use transactional elements to influence subordinates behaviors, such as rewarding ethical and desired behavior (Brown et al., 2005). Ethical leaders guide employees regarding ethical standards and appropriate behaviors, which may include OCB. Ethical leaders can also influence OCB through social learning processes (Brown & Treviño, 2006). Thus, we expect role clarification and ethical guidance to be positively related to OCB. Finally, we expect no relationship between leaders’ concern for sustainability and OCB. Such leaders are aware of their effects on the surroundings and are role models of environmentally responsible behavior (Ferdig, 2007). However, this has no relation with the direct social environment or tasks of employees and therefore we do not expect a relationship between concern for sustainability and OCB. We hypothesize:

**Hypothesis 3:** Ethical leader behaviors and fairness, integrity, power sharing, people orientation, role clarification and ethical guidance are positively related to organizational citizenship behavior (OCB).
Trust in the Leader

In line with existing research, we expect a positive relationship of ethical leadership with trust. Brown et al. (2005) found high relationships with trust. Also, Den Hartog and De Hoogh (2009) found that power sharing and fairness were related to trust in management. We also found this in Study 1. Here we look specifically at trust in the leader. Social exchange theory suggests trust grows as leaders and employees interact in high-quality relationships (Blau, 1964). Dirks and Ferrin (2002) propose that trust in leaders is built on behaviors such as open communication, integrity, availability and reliability. Ethical leaders’ fairness and caring, consistent behavior and clear communication likely result in trust. Power sharing is a signal of trust by the leader that employees may reciprocate. Also, ethical leaders who act environmentally friendly may inspire trust as this behavior shows their interest in issues beyond themselves (cf. Kanungo, 2001). Thus, we expect that all seven ELW ethical leader behaviors are positively related to trust in the leader.

Hypothesis 4: Ethical leader behaviors and fairness, integrity, power sharing, people orientation, role clarification, ethical guidance and concern for sustainability, are positively related to trust in the leader.

Perceived Leader Effectiveness

Brown et al. (2005) found that ethical leadership was related to leader effectiveness and De Hoogh and Den Hartog (2008) found that fairness and role clarification but not power sharing related positively with management team effectiveness. Although only a few studies focus directly on ethical leadership and effectiveness, related research suggest positive relationships. For example, Den Hartog et al. (1999) found that honesty and integrity characterize highly effective leaders in the eyes of managers. Social learning theory suggests employees identify with and emulate their ethical leaders and likely perceive them as effective (cf. Bandura, 1986).

Ethical leaders are consistent, caring and fair, and feel responsible for their actions. We expect followers to experience such ethical leaders as effective. We suggest that fairness, integrity, role clarification, people orientation and ethical guidance contribute to
perceptions of leader effectiveness. However, power sharing and sustainability focus seem less important to be seen as effective. As stated, power sharing was unrelated to top management effectiveness in the study by De Hoogh and Den Hartog (2008). Yukl (2006) notes that research results on the effectiveness of participative leadership are inconsistent, suggesting such leadership may be more or less effective depending on the context. Thus, we expect that overall power sharing is not important for leaders to be perceived as effective. Also, sustainability oriented leaders are not necessarily more effective. A focus on sustainability and awareness of stakeholder in and beyond the organization is an element of ethical leadership that is more concerned with symbolizing values and behaving consistently with values than with achieving day to day results. Thus:

Hypothesis 5: Ethical leader behaviors and fairness, integrity, people orientation, role clarification and ethical guidance are positively related to perceived leader effectiveness.

Perceived Employee Effectiveness

To our knowledge, ethical leadership has not yet been investigated in relation to employee effectiveness. Related research suggests a positive relationship. For instance, Rowold (in press) found that moral-based leadership is related to employee effectiveness. He argues that fair, consistent and caring treatment enhances employee effectiveness as such treatment will make employees more willing to carry out tasks set out by the leader. Positive reciprocity suggests that employees will work more effectively when their ethical leaders treat them in this way (Gouldner, 1960). For example, interactional justice was positively related to task performance (Aryee, Budhwar, & Chen, 2002). Thus, we expect that fairness, integrity and people orientation are positively related to employee effectiveness.

Also, ethical leaders who share power, give employees a sense of competence, and allow them to be independent (Resick et al., 2006) are likely to enhance self-efficacy (Kanungo, 2001). In turn, this may enhance employee effectiveness. Power sharing gives followers the opportunity to develop skills, which enhances effectiveness (Yukl, 2006). Ethical leaders’ open communication and clarification of expectations may also create conditions conducive to effectiveness (De Hoogh & Den Hartog, 2008). By communicating rules and guidelines, lead-
ers enable more effective employee behavior. Thus, power sharing and role clarification are expected to be positively related to employee effectiveness. Sustainability oriented or specific ethical guidance, however, do not necessarily enhance employee effectiveness. Sustainability oriented leaders are concerned with the welfare of the wider environment rather than with task-oriented behavior and ethical guidance entails making employees aware of ethical issues rather than focusing them directly on effective in-role performance. We hypothesize:

**Hypothesis 6:** Ethical leader behaviors and fairness, integrity, power sharing, people orientation, and role clarification are positively related to perceived employee effectiveness.

**Method Study 2**

**Sample and procedure.** We conducted a multi-source study. Employees rated ethical leader behaviors, trust and leader effectiveness and leaders rated employees’ effectiveness and OCB. Leaders in financial and business services, health care, government, construction and education organizations in the Netherlands were contacted and asked to voluntarily participate. Participating leaders selected two employees to complete a questionnaire. Survey packets were sent to leaders and contained a letter for each respondent explaining the procedure and confidentiality. As an incentive, leaders were offered an overall research report at the end of the study. Each respondent received a postage-paid envelope for returning their questionnaire directly to the researchers.

For re-testing the factor structure, we used the complete employee sample of study 2 \( (n = 316) \), which meets the recommendation for a minimum sample size of 200 respondents for a confirmative factor analysis (Hinkin, 1998). For 20 employees we did not receive the corresponding leader questionnaire and the identification number was removed from two employee questionnaires. These 22 questionnaires could therefore not be used in further analyses. Thus, for testing the hypotheses, 294 matched questionnaires (which means, employee-leader dyads) were used. The response rate was 60 %. Average age was 44 years \( (SD = 10) \) for leaders and 35 \( (SD = 11) \) for employees, and 76 % of leaders and 53 % of employees were male. For 87 %, supervisor-subordinate tenure was over six months.
Measures. Perceived ethical leadership was measured with the 38 ELW items administered in Dutch (see Table 3 for the full text of all items in English). The English version for each ELW item was developed through translation and back translation by experts. Employees also rated ethical leadership with the 10-item ELS (Brown et al., 2005). Cronbach's \( \alpha \) was .81. Employees rated leader effectiveness using the same items as in Study 1. Employees rated trust in the leader. The Cook and Wall (1980) trust in management items used in Study 1 were rephrased to measure trust in supervisor, e.g. ”I have complete confidence in my supervisor”. Cronbach’s \( \alpha \) is .80.

Organizational citizenship behavior was assessed using 10 items from MacKenzie, Podsakoff and Fetter (1991) that were reformulated to be used as supervisor ratings. A sample item is: ”is always ready to help or lend a helping hand to those around him/her”. OCB was split in civic virtue (3 items), courtesy (4 items) and altruism (3 items). Cronbach’s \( \alpha \) were: courtesy .76, civic virtue .73, altruism, .78 and OCB combined .84. Employee effectiveness was assessed with two items: ”How effective is the employee in his/her daily work?” and ”To what extent is the overall functioning of the employee satisfactory”. All items were rated on a 5-point scale. For effectiveness it ranged from 1 (not at all) to 5 (very much so), for all other items from 1 (strongly disagree) to 5 (strongly agree).

Results Study 2

The next step in the validation process was to conduct CFA’s to reconfirm the ELW factor structure. The goodness of fit of the a priori seven-factor model was tested in comparison to 12 competing models varying from a single factor model to several six factor models. The results are presented in Table 5. We used different fit indicators (cf. Hu & Bentler, 1999): the chi-square \( (\chi^2) \), comparative fit index (CFI \( \geq .96 \)), non-normed fit index (NNFI \( \geq .96 \)), standardized root-mean-square residual (SRMR \( \leq .08 \)) and the root-mean-square error of approximation (RMSEA \( \leq .06 \)). The results illustrate that the a priori seven-factor model, with fairness, role clarification, power sharing, people orientation, concern for sustainability, integrity and ethical guidance items loading on separate factors is the best fitting model, \( \chi^2 \) seven-factor model \((644, N = 296) = 1191.13, p < .001, \) NNFI = .97, CFI = .97, SRMR = .06, RMSEA = .05.
Table 5 - Comparison of alternative factor structures using confirmatory factor analyses, study 2

<table>
<thead>
<tr>
<th>Model 3</th>
<th>$\chi^2$ ($df$)</th>
<th>$\Delta \chi^2$ ($\Delta df$)</th>
<th>RMSEA</th>
<th>NNFI</th>
<th>CFI</th>
<th>SRMR</th>
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<tr>
<td>7-factor model (ELW)</td>
<td>1191.13 (644)</td>
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<td>.05</td>
<td>.97</td>
<td>.97</td>
<td>.06</td>
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<tr>
<td>1-factor model</td>
<td>3145.78 (665)</td>
<td>1954.65** (21)</td>
<td>.14</td>
<td>.87</td>
<td>.88</td>
<td>.10</td>
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<tr>
<td>6-factor model (people orientation/power sharing)</td>
<td>1317.50 (650)</td>
<td>129.37** (6)</td>
<td>.06</td>
<td>.97</td>
<td>.97</td>
<td>.07</td>
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<tr>
<td>6-factor model (people orientation/fairness)</td>
<td>1469.04 (650)</td>
<td>277.91** (6)</td>
<td>.07</td>
<td>.96</td>
<td>.96</td>
<td>.07</td>
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<tr>
<td>6-factor model (people orientation/integrity)</td>
<td>1744.53 (650)</td>
<td>553.40** (6)</td>
<td>.07</td>
<td>.96</td>
<td>.96</td>
<td>.07</td>
</tr>
<tr>
<td>6-factor model (people orientation/ethical guidance)</td>
<td>1690.37 (650)</td>
<td>499.24** (6)</td>
<td>.09</td>
<td>.92</td>
<td>.95</td>
<td>.08</td>
</tr>
<tr>
<td>6-factor model (integrity/role clarification)</td>
<td>1538.69 (650)</td>
<td>347.56** (6)</td>
<td>.08</td>
<td>.95</td>
<td>.96</td>
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<tr>
<td>6-factor model (integrity/fairness)</td>
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<td>.95</td>
<td>.08</td>
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<td>3-factor model (people orientation/power sharing/fairness) (integrity/role clarification/ethical guidance)</td>
<td>2328.09 (662)</td>
<td>1136.96** (18)</td>
<td>.11</td>
<td>.92</td>
<td>.92</td>
<td>.08</td>
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<td>5-factor model (people orientation/power sharing/fairness)</td>
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<td>.95</td>
<td>.96</td>
<td>.07</td>
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<td>4-factor model (people orientation/power sharing) (integrity/ fairness) (ethical guidance/role clarification)</td>
<td>1998.30 (659)</td>
<td>807.17** (15)</td>
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<td>.93</td>
<td>.94</td>
<td>.09</td>
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<td>2-factor model (people orientation/power sharing/fairness. Integrity/ethical guidance/role clarification)</td>
<td>2890.26 (664)</td>
<td>1699.13** (20)</td>
<td>.01</td>
<td>.89</td>
<td>.89</td>
<td>.10</td>
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</table>

Note. $N = 216$. a) Statistics reported are based on the use of a covariate matrix; ** $p < .01$. NNFI= Non-Normed Fit Index; CFI= Comparative Fit Index; SRMR= Standardized Root Mean Square Residual; RMSEA= Root Mean Square Residual.

1) Best fitting model; 2) All alternative models are compared to the 7-factor model; 3) 1-factor model: representing uni-dimensional ethical leadership. 6-factor models: representing two factors which are > .50 correlated representing one factor (see in table between brackets the name of the factors). 3-factor model: representing an empowering, transactional and environment factor. 5-factor model: representing an empowering factor and the other original factors separately. 4-factor model: representing people orientation and power sharing as one factor, integrity and fairness as one, ethical guidance and role clarification as one, finally concern for sustainability factor. 2-factor model: concern for sustainability and the other factors together as one factor.
We also tested and compared alternative models to the seven-factor model by testing the change in $\chi^2$. The difference in chi-square between the seven-factor and the one-factor model is 1954.65 (i.e., 3145.78-1191.13), which is distributed as chi-square with 21 (665-644) degrees of freedom. This value is statistically significant, suggesting that the a priori seven-factor model measuring the ELW fits significantly better than the one-factor model, in which all items load on one ethical leadership factor. We also tested other models, but none produced a better fit than the a-priori seven factor model. The one-factor model has worst fit and relatively poor fit indexes. One six-factor model (items of people orientation and power sharing loading on one factor) $\chi^2 (df = 650, N = 296) = 1317.50, p < .001$ (NNFI = 0.97, CFI = 0.97, SRMR = 0.07, RMSEA = .06.) also showed good fit indices, but the chi-square difference, $\Delta\chi^2 = 129.37, df = 6$, indicates that the seven factor model fits the data better. The fit indicators and chi-square difference tests of other alternative models are shown in Table 5. In sum, the seven-factor model fit the data best and thus supports the proposed ELW factor structure and multidimensionality. The CFA confirms the findings from Study 1 and provides further evidence of the construct validity of the ELW.

To determine whether our ELW dimensions load on a second order overall ethical leadership factor we performed a second-order CFA, in which the individual ethical leadership items were modeled as indicators of their underlying dimensions (fairness, consistency, consideration, power sharing, role clarification, ethical guidance, concern for sustainability), which in turn were modeled as indicators of an overarching latent ethical leadership construct. This second-order factor structure also showed a good fit, $\chi^2 (658, N = 278) = 1224.95, p < .01, CFI = .97; NNFI = .97 RMSEA = .06; SRMR = .07$. Thus, this CFA suggests a high second-order agreement among the constructs of the ELW subscales within the ethical leadership domain.

The Cronbach’s $\alpha$’s and intercorrelations of the ELW scales are presented in Table 6. All $\alpha$’s are above .70. Intercorrelations are similar to those in Study 1 (ranging from $r = .16$ to $r = .57$). As expected, the ELW behaviors again correlated significantly and positively with the ELS (see Table 7). The correlations were similar to those in study 1, albeit somewhat lower. The average correlation between ELW scales and the ELS was $r = .58$. The correlation between people orientation and the ELS was highest ($r = .75$) and that with
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<td>7. Ethical guidance b</td>
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<td>16. Civic virtue/OCB-O a</td>
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</table>

Note. n varies between 285 and 293 due to missing variables. Cronbach's alpha coefficients are displayed on the diagonal.

*) correlations are significant at p < .05; **) correlations are significant at p < .01

a = supervisor rated  b = employee rated
concern for sustainability lowest ($r = .37$). These findings again support construct validity of the ELW.

All ethical leadership dimensions were significantly positively correlated with trust in the leader (ranging from $r = .34$ to $r = .61$) and perceived leader effectiveness (ranging from $r = .21$ to $r = .56$). Four of the seven dimensions, namely fairness, integrity, power sharing and people orientation were significantly and positively correlated with employee effectiveness (ranging from $r = .11$ to $r = .21$). Three of the seven dimensions, namely fairness, power sharing and people orientation were significantly and positively correlated with employees OCB (ranging from $r = .20$ to $r = .23$). These findings support the multidimensionality of ethical leadership.

To further assess whether the ELW dimensions add to the existing ELS measure, we conducted hierarchical regression analyses, first entering the uni-dimensional 10-item ELS scale (Brown et al., 2005) into the equation, followed by the set of dimensions of the ELW. Table 7 presents the results. If the ELW dimensions explain additional variance, this helps to further establish the validity of the ELW measure (see also Liden & Maslyn, 1998). The dependent variables were trust, OCB, leader effectiveness and employee effectiveness. The $\Delta R^2$ for step two showed that the ELW as a set explained an additional 10 % of the variance in trust in the leader, 7 % of the variance in OCB, 12 % of the variance in leader effectiveness and 5 % of the variance in employee effectiveness after controlling for the ELS. The models of the additional variance explained by the ELW after controlling for the ELS were all significant. As Table 7 indicates, for all four dependent variables the ethical leadership dimensions as a group significantly explained variance, yet for each dependent variable only a subset of dimensions was significant. Thus, the ELW behaviors explained additional variance in all outcomes over and above the ELS.

To test potential relationships between ethical leader behaviors and outcome measures, we conducted an additional series of regression analyses without controlling for the ELS (not reported in the Table). These analyses indicate whether any ethical leader behavior explains variance in the dependent variable after accounting for the effects of the others, but not controlling for the ELS. The results are similar to those of the regression analyses in Table 7 in which we controlled for the ELS; the same ethical leadership dimen-
Table 7 - Summary of regression analyses

<table>
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<th>Variables</th>
<th>Trust in leader</th>
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<th>Leader effectiveness</th>
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<td></td>
<td>-.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethical guidance</td>
<td>.00</td>
<td>.13*</td>
<td></td>
<td>-.11</td>
<td></td>
<td>-.13</td>
<td></td>
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</tr>
</tbody>
</table>

Note. n varies between 283 and 291 due to missing variables. All tests are one-tailed.

*p < .05; **p < .01.
sions are relevant for each of the outcome variables, with one exception. The relationship between people orientation and leader effectiveness is significant here, but not when controlling for the ELS.

If we do not take the ELS into account, the set of ethical leadership dimensions together explained 7.8 % of the variance in overall OCB. More specifically, power sharing ($\beta = .14, p < .05$) and fairness ($\beta = .20, p < .01$) account for a unique proportion of the variance. The beta-weights of the other leader behaviors became non-significant when adjusted for the influence of the other ELW behaviors. Thus, hypothesis 3 is only partly supported. Regarding the separate OCB dimensions, when controlling for the other ELW behaviors only fairness had a significantly positive beta-weight for civic virtue ($\beta = .18, p < .05$) and courtesy ($\beta = .17, p < .05$), whereas for altruism only power sharing had a significant beta-weight ($\beta = .15, p < .05$). These differential effects again suggest ethical leadership is multi-dimensional.

The total model explained 57 % of the variance in trust and several ELW behaviors had a significant effect after controlling for the influence of the other elements, namely fairness ($\beta = .23, p < .01$), integrity ($\beta = .30, p < .01$), people orientation ($\beta = .19, p < .01$), role clarification ($\beta = .14, p < .01$), and concern for sustainability ($\beta = .09, p < .05$). Thus, hypothesis 4 is supported for fairness, integrity, people orientation and role clarification, but not for power sharing, ethical guidance and concern for sustainability.

The ELW behaviors together explained 41 % of the variance in leader effectiveness. Beta weights for integrity, people orientation role clarification and ethical guidance were positive and significant ($\beta = .32, p < .01$, $\beta = .22, p < .01$, $\beta = .14, p < .05$, $\beta = .16, p < .05$ respectively). The beta for people orientation is no longer significant after controlling for the ELS. Taken together, the results support hypothesis 5 for integrity, power sharing, people orientation, role clarification, ethical guidance and concern for sustainability, but not for fairness.

Finally, the ELW behaviors explained 5.4 % of the variance in supervisor-rated employee effectiveness. When controlling for all others, fairness ($\beta = .14, p < .05$) and power sharing ($\beta = .13, p < .05$) account for a unique proportion of the variance. Thus, the results partially support hypothesis 6, namely for the dimensions fairness and power sharing. Taken
together, the results support the multidimensionality of ethical leadership. Generally in line with expectations, the ELW behaviors with a significant beta weight varied depending on the dependent variable.

**Discussion**

The purpose of our studies was to contribute to the literature by developing the theory-based multidimensional Ethical Leadership at Work (ELW) questionnaire measuring ethical leadership including various related behaviors: fairness, role clarification, ethical guidance, people orientation, power sharing, integrity and concern for sustainability. Generally, the a priori seven factor structure was stable across two independent field samples and internal consistencies were good, supporting construct validity (cf. Hinkin, 1998). Providing further support for construct validity, ethical leader behaviors explained variance in trust, leader effectiveness, employee effectiveness and OCB after controlling for the ELS. This suggests the ELW measure meaningfully extends the ethical leadership field. Overall, our studies result in an ethical leadership measure of 38 items related to seven behaviors.

*Convergent and Discriminant Validity.*

In both studies, all seven ethical leader behaviors were significantly related to the uni-dimensional ethical leadership scale (ELS) of Brown et al. (2005) supporting convergent validity. Yet, the ELS and ELW scales also clearly differ. Also, as expected positive (but not too high) relationships were found with transformational and transactional leadership. Discriminant validity was demonstrated by the small or negative relations to constructs which should not be related to the ELW behaviors (passive and autocratic leadership). Also, the ELW was unrelated to employees’ gender and age.

*Criterion Related Validity.*

We found support for ELW criterion-related validity as we could replicate results found in previous studies, namely positive relationships between ethical leader behaviors and commitment, satisfaction, leader effectiveness and trust. Further support for the validity and multidimensionality of our measure was provided by the regression results showing
that ELW behaviors contributed differently to the explanation of variance in the dependent variables. Its multidimensionality has both empirical and theoretical advantages over a unidimensional scale. For example, the separate dimensions may help us further unpack the different processes by which ethical leaders affect others. A complexity of the construct validity of a multi-dimensional construct according to Messick (1995) is that the measurement of constructs fails to include all dimensions and is thus too narrow or the measurement contains dimensions that are related to distinct constructs and is too broad. It could be that behaviors we do not consider ethical in our theoretical framework are not yet included in the ELW. Given that the ethical leadership field is in its early development and growing strongly, we should remain open the possibility of developing more detailed models of ethical leadership. Also, in some studies, such as those in which ethical leadership is not a key variable or short measures are required, a uni-dimensional measure such as the ELS forms an excellent alternative.

As stated in the result section of study 1, the concern for sustainability and concern for society scales need further development. The originally developed scale for environment orientation combined these items, but was empirically split into these two dimensions. The concern for society dimension was not supported as items did not cluster or load sufficiently. Thus, we only included concern for sustainability in the ELW. The relevance of concern for society may be context dependent. The difficulty with such items generally may be that they are mostly more abstract and less focused on the daily work and experiences of employees than the items of the other dimensions. Leaders’ actions in regard to sustainability and/or society are not constantly visible and do not always have a direct impact on employees. Sample items for a future scale for concern for society could be: “my leader realizes his/her actions have an influence on the organization and the society” or “my leader is willing to invest in society”. For future research it could be worthwhile to include economic concerns as well in the ELW measurement. Environment, society, and economy related activities are linked (Ferdig, 2007). For example, reducing energy use or recycling materials can reduce costs (i.e., economic concerns). Another direction for future research would be long term research, as sustainable leadership is described as enabling over time (Hargreaves & Fink, 2004; 2006).
In line with previous research (e.g., Brown et al., 2005; De Hoogh & Den Hartog, 2008) we found that ethical leadership is positively related to team and organizational commitment, trust, leader effectiveness and job satisfaction. More specifically, we found that leaders who show consistent behavior, guide ethical behavior, and clarify work roles were perceived as more effective. Also, both studies clearly show that ethical leadership is related to trust. Both our results and those of Brown et al. (2005) show higher associations between the ELS and trust than we found for the ELW. This is likely due to the ELS ethical leadership operationalization which includes an item about trust in the leader (“can be trusted”). We argue trust and ethical leadership are different constructs and should be distinguished.

Other significant findings that extend previous research include the relationship of ethical leadership (employee rated) with employee OCB (supervisor rated) and perceived employee effectiveness (supervisor rated). Study 2 shows that power sharing and fairness are important ethical leader behaviors for employee OCB. Employees who see their direct supervisor as sharing power are likely to behave responsibly, help others, and become involved in the organization. Leaders treating employees fairly also elicit OCB. The social exchange perspective suggests that employees may reciprocate fair treatment (cf. Cropanzano, & Mitchell, 2005). Social learning theory suggests employees are likely to copy the behavior of their leader and thus if the leader treats them fairly and respectfully, they become more likely to treat others in such a manner.

Contrary to expectations, none of the other ELW behaviors uniquely related to OCB. Podsakoff et al. (1996) found similar correlations between other leadership styles and OCB. Their results indicated that the context in which the leader operated was more important than the leader behavior itself. In future research, context variables should be included in ethical leadership studies (e.g., ethical dilemma situations). Who rates OCB may also make a difference. Here supervisor ratings were used. Peer-ratings may also be of interest as not all relevant behavior is best observed by the leader (e.g., altruism). The finding that some ethical leadership behaviors do not relate to OCB, but are related to other outcomes such as perceived leader effectiveness suggest that different aspects of ethical leadership may affect followers and the organizations in different ways, which supports the need for a multi-dimensional approach. The results for employee effectiveness were weaker.
The variability in these effectiveness ratings was rather limited, which may explain the low relationships between ethical leader behaviors and employee effectiveness. More elaborate measures of effectiveness may be needed to further study this relationship. Our main focus was the development of the ELW.

Although we followed the guidelines and steps for validation of psychological measurements, the conducted validation studies have limitations. For example, the meaning of a score may vary across people or settings implying that measurement validation is a continuing process (Messick, 1995). However, our measure was developed on a theoretical base, suggesting a stronger rational for the meaning of a score (Messick, 1995). In other words, we start to demonstrate construct validity by relating the ELW to other measures based on theoretical explanations. A first step in a process of developing the validity of the ELW is thus made. Further research is needed to further assess construct validity. For example, other variables that need to be considered include authentic leadership and follower (un)ethical behaviors. As ethical leadership is a recent and strongly developing research field, other operationalizations of ethical leader behaviors could also be valuable. Additionally, alternatives for surveys such as experiments or coding of interviews could further our understanding of ethical leadership.

**Limitations and Strengths**

Taken together, the studies presented here have several strengths. Our samples represented a mix of job levels and sectors; results are relatively consistent across two field studies; and relatively large sample sizes and measures with sound psychometric properties were used. Further, in line with recommendations about scale development, item generation is based on the combination of interviews and theory (Hinkin, 1995). Also, the factor structure was tested on two independent samples. Hinkin (1998) stressed the importance of testing the reliability and factor structure of a newly developed measurement on independent samples to assess construct validity. A final strength is our investigation of both convergent and discriminant validity as both are important and form the basics of construct validity (Messick, 1995). We show positive as well as null or negative relationships between the ELW and other variables.
Nevertheless, there are also limitations. A limitation of the ELW is that three items had (low) cross loadings of .33, .34 and .38 on a second factor. Based on content we decided to keep the three items with their original factor. Also, the ELW shares potential limitations with other leadership measures (see Podsakoff et al., 2003). Recently, formative and reflective measurement models are distinguished. So far, leadership measures are typically developed along the reflective measurement model (cf., authentic, servant and transformational leadership). In line with this, the ELW was developed along the guidelines of the reflective measurement model. However, the formative method may also be used and might improve the development of leadership measures. We encourage future research to incorporate measurement model specification in more detail.

The ELW has a mix of positively and negatively worded items (with far more positive ones). Research has shown that negatively worded items could load on a separate factor (cf. Ibrahim, 2001). Others argue that negatively and positively worded items should be mixed to reduce response bias (Nunnally, 1978). For the negatively worded items we used either quotes from the interviews or items from existing scales. According to Rorer (1965) and Schriesheim and Eisenbach (1995) it is extremely difficult to reverse item content and not change the meaning of the item. Thus, we did not create negative items from positively worded items. We carried out additional CFA’s that did not support a separate factor for the negatively worded items. Thus, the potential negative effects of negatively worded items do not seem obvious in the ELW.

Another limitation is the use of self-report measures for outcomes in study 1 introducing the possibility that common source variance inflated observed relationships. For some relationships the use of self-reports in these studies is justified by the nature of the variables examined (Spector, 1994). For example, when assessing attitudinal variables such as trust. Spector (2006) argues that self-report designs are useful as a first study and suggests properly developed measures are resistant to common source bias. To minimize the common method bias we also informed the participants about the anonymity of the study (cf. Spector, 2006). However, although Spector (2006) suggests that common method variance concerns may be overstated, we nevertheless encourage subsequent research to utilize multiple sources in future research whenever possible to avoid this potential confound. For
instance, leader effectiveness could be assessed through another source (e.g., supervisor) or through more objective performance measures. In this study, leader effectiveness was measured through the eyes of the employees. The participants were from various organizations and leaders had different tasks and thus it would be hard to find comparable objective performance measures. To examine whether common-method variance was a problem, we conducted the Harman single-factor test recommended by Podsakoff et al. (2003). This test assesses whether a strong amount of common-method bias causes variables to all load on a single factor. This was not the case. Thus, common-method variance did not account for the majority of associations between variables.

The data in study 1 was collected using a snowball method. Thus, sampling error may be a problem and no response rate could be calculated. However, the correlations between the study variables found in the multi-source study are similar to those found in the common-source study. Another concern is that the managers in study 2 chose the subordinates who participated in the study. This procedure is commonly used in leadership research and although ratings remain confidential the possibility exists that such selection method leads to a positive bias or restricts variance. Last concern is that employee effectiveness was assessed with two items. It would have been desirable to have more items to accurately and validly assess employee effectiveness. For future research, we also recommend measuring effectiveness using more objective rather than perceptive data. However, as stated above, in our studies respondents were employed in diverse organizations and had various tasks and thus finding comparable objective performance measures would have been hard.

Implications and Future Research

Distinguishing multiple ethical leader behaviors will help us understand when and how such behaviors differentially relate to employee and organizational variables. Although our results are encouraging, scale development is a continuous process. Future research should determine the validity of the ELW scales in different contexts and for different outcomes and as such expand its nomological network. Further research may focus on the investigation of the ELW in relation to other variables, such as employees’ ethical behaviors.
In addition, moderators (e.g., ethical culture) that may influence the relation between ethical leadership and outcomes should be investigated as other leadership styles are often shown to affect employees in interaction with situational factors (e.g., Den Hartog, De Hoogh, & Keegan, 2007).

Although two independent studies were conducted among employees from different industries, functions and organizational levels, generalizability should be further addressed. The present studies were conducted in the Netherlands and replication of the findings and support for the validity of the ELW instrument in different contexts and countries is needed. So far, there is little research on ethical leader behaviors similar to those in the ELW in countries other than the Netherlands or on ethical leader behaviors across cultures. For example, due to the low power distance in the Netherlands power sharing by the leader may be more important than in cultures characterized as having higher power distance (cf. Den Hartog et al., 1999).

Nowadays many in society consider ethical concerns in decisions, including job applicants in determining whether to accept a job and customers in purchasing a product (Turban & Greening, 1996). Organizations need leaders to behave ethically to achieve the organization’s objectives in a socially responsible way and to protect their reputation. The development of a multi-dimensional instrument measuring ethical leadership thus has practical implications for organizations. The measure could give organizations an idea of the levels and types of ethical leader behavior shown by managers. Based on this, more specific training and development opportunities can be provided. So far, results on the effects of ethical leadership are positive; thus it may well be worthwhile for organizations to invest in the development of ethical behavior.

The current study investigated the discriminant, convergent and criterion-related validity of the ELW. The results highlight the importance of having a multi-dimensional measure of ethical leader behavior. Particularly in the multi-source study, the ethical leader behaviors related differently to followers’ OCB and effectiveness. Future research can further examine the link between ethical leader behaviors and employee ethical conduct. Recently, a validated measure of employee ethical conduct has become available (Kaptein, 2008). In addition, the development of the environment oriented aspect of ethical leader-
ship is of importance for the field. Even or maybe especially in a global economic crisis, experienced leaders behaving with concern for the environment and all stakeholders are desirable.