

Master Thesis

**Linking Ethical Leadership to Employee Well-Being: The Role of  
Organizational Identification and Moral Uncertainty**

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### Abstract

Research on ethical leadership has primarily focused on the way ethical leadership influences follower behavior. The present study extends the research by examining how ethical leadership influences employee well-being. In the scope of this it is proposed that ethical leadership positively affects employee well-being (1), and that organizational identification mediates this relationship (2). Additionally, it is argued that moral uncertainty moderates the relationship between ethical leadership and employee well-being, as well as between ethical leadership and organizational identification (3). A cross-sectional self-administered online-questionnaire (N = 109) confirmed that ethical leadership has a positive effect on employee well-being, and that organizational identification mediates the relationship between ethical leadership and employee well-being. Yet, the third hypothesis was not confirmed as moral uncertainty did not appear to moderate the relationships between ethical leadership and employee well-being, as well as between ethical leadership and organizational identification. The present study extends the current literature by creating the new concept of moral uncertainty and investigating organizational identification as a mediator.

*Keywords:* ethical leadership, employee well-being, employee stress, organizational identification, moral uncertainty

## Introduction

Changes in the economy created a fast paced, and increasingly competitive working environment (Rosa, 2013). Although this has led to increased standards of living, it has also resulted in increased levels of work-related stress, poorer psychological well-being, and the rise of new ethical dilemmas. Indeed, many companies have experienced increased process complexity and with it a loss of oversight because of the globalized economy. Ultimately, increased complexity and loss of oversight create an array of new ethical decisions to be made by all members of society. Considering this, the continuous revelations of ethical scandals in the business world come as no surprise to many. Scandals such as the recent Volkswagen emission-fraud scandal, Wells Fargo fake-accounts scandal, and News Corp hacking scandal, all exemplify the negative consequences of a lack of ethics in leading companies (Mukherjee, 2016, Dec 28). In an attempt to identify the origin of ethics in the business environment, researchers find themselves going back to Kohlberg's (1969) argument that most individuals look to others for ethical guidance. As guidance is usually provided by leaders, ethical leadership is thus a current topic of high relevance.

As with all types of leadership, ethical leadership only exists when followers perceive their leaders to possess and exhibit specific characteristics that define them as ethical leaders. Brown and Treviño (2006), for example, characterized ethical leaders to be concerned with fairness for employees, possess integrity and humility, as well as to be honest and willing to learn from their mistakes. Similarly, Resick, Hanges, Dickson, and Mitchelson (2006) found 'character and integrity, ethical awareness, people-orientation, ability to motivate, ability to encourage and empower, and managing of ethical accountability' to be the six main attributes of ethical leaders across cultures. As such, ethical leaders are thought to influence followers through social learning (Bandura, 1977) and social exchange (Emerson, 1976).

Furthermore, these positive characteristics associated with ethical leaders have been found to positively affect followers. For one, a lack of ethical leadership has been associated with higher levels of employee deviance (Tepper et al., 2009; Thau, Bennett, Mitchell, & Marrs, 2009), suggesting that ethical leadership decreases deviance at the workplace in a reciprocal manner. Additionally, ethical leadership has also been linked to followers expressing more pro-social behavior, such as organizational citizenship behavior (Brown & Treviño, 2006), as well as expressing trust in and satisfaction with their leader and their job. Consequently, ethical

leadership has been linked with an increase in job dedication as followers express higher organizational commitment (Brown & Treviño, 2006). Most importantly, ethical leadership has been associated with increased well-being (Bedi, Alpaslan, & Green, 2015; Kalshoven & Boon, 2012) and decreased stress levels (Bedi et al., 2015). This paper thus aims to replicate the findings by Kalshoven and Boon (2012) that ethical leadership is connected to well-being, additionally considering the influence of a mediating and a moderating factor.

So far, one mediating factor of the relationship between ethical leadership and employee well-being that has not been considered in depth is the concept of organizational identification. Additionally, a moderating factor that has not been examined is moral uncertainty. In fact, the literature in the field of ethical leadership does not provide a construct and measurement for the concept of moral uncertainty. Nonetheless, the present paper would argue that a conceptualization of moral uncertainty is essential to understand the link between ethical leadership, organizational identification, and employee well-being. Moreover, the concept of moral uncertainty is also of importance as it provides crucial support for the rationale that it is indeed the ethical aspect of ethical leadership, i.e., the communication and demonstration of ethical norms, which leads to the proposed outcomes of increased psychological well-being and decreased stress.

Thus, the present paper contributes to the literature on ethical leadership in at least two ways. First, by investigating the mediation of organizational identification, the understanding of the relationship between ethical leadership and employee well-being is extended. Second, the present paper contributes to the literature by developing a way to measure the concept of moral uncertainty, based on the uncertainty-identity theory (Hogg, 2007) and the ideas of self-concept clarity (Campbell et al., 1996). This allows for the investigation of moral uncertainty as a potential moderator and thus alludes to a new field of ethical leadership research.

The present paper will start by outlining the theoretical background of the concepts ethical leadership, work-related well-being and stress levels, organizational identification, and moral uncertainty. Based on the given background, hypotheses are proposed. Next the procedure and results will be discussed. Finally, based on the discussion of results, practical implications will be given, strengths and limitations identified, and a conclusion will be drawn.

## Theoretical Background and Hypotheses

### Ethical Leadership

Ethical leadership is most commonly defined as “the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct through two-way communication, reinforcement, and decision making” (Brown, Treviño, & Harrison, 2005, p. 120). Considering that ethical leaders ought to demonstrate normatively appropriate conduct, ethical leadership is distinguished from other leadership styles through the emphasis of practicing moral management (Brown & Treviño, 2006), i.e., the communication of moral cues (van Gils, Van Quaquebeke, van Knippenberg, van Dijke, & De Cremer, 2015). Brown and Treviño (2006) split the concept of morality into two dimensions – the *moral person* and *moral manager*. The moral person dimension describes the personal characteristics of the manager. Ethical leaders are often perceived as trustworthy and honest individuals that make fair and substantiated decisions in their professional and private life. Moreover, ethical leaders are perceived to care about other people and emotionally support followers whenever they experience low levels of well-being (Kalshoven & Boon, 2012). A moral person thus demonstrates ethical behavior (Bedi et al., 2015). The moral manager dimension refers to a manager’s proactive efforts to establish an ethical climate by making ethics part of the organizational agenda (Bedi et al., 2015; Brown & Treviño, 2006). Moral managers communicate and model ethical behavior in the workplace. Furthermore, they often ensure enactment of ethical behavior by followers through the use of a reward system (Brown & Treviño, 2006), demonstrating that ethical leadership contains aspects of the transformational, as well as transactional leadership style (Brown & Treviño, 2006; Brown et al., 2005).

The influence of ethical leaders on followers can be explained using at least four different theories: the social identity theory (Tajfel, 1959, 1969), social exchange theory (Emerson, 1976), social learning theory (Bandura, 1977), and uncertainty-identity theory (Hogg, 2007). Indeed, the definition of ethical leadership already insinuates the importance of two of the underlying theories. The phrase ‘demonstration of normatively appropriate conduct’, for example, may allude to the role modeling component of social learning theory. Similarly, ‘interpersonal relationships’ may point towards the core ideas of social exchange theory. Generally, the social learning (Bandura, 1977) and social exchange (Emerson, 1976) theories help explain how ethical

leadership affects employee well-being and levels of stress. Instead, the social identity theory (Tajfel, 1959, 1969) and uncertainty-identity theory (Hogg, 2007) help explain the role of organizational identification and moral uncertainty in regard to the overarching relationship between ethical leadership and employee well-being.

Irrespective of the underlying theories, ethical leadership has been associated with a variety of positive factors. For example, previous research has identified a link between ethical leadership and high levels of employee job satisfaction, job engagement, organizational citizenship behavior, and commitment (Bedi et al., 2015; Brown & Treviño, 2006; Den Hartog & Belschak, 2012; Kalshoven & Boon, 2012). Moreover, ethical leadership has also been found to increase employee organizational identification (Hogg, 2001; Hogg & Terry, 2000; van Knippenberg & Hogg, 2003; Van Knippenberg, Van Knippenberg, De Cremer, & Hogg, 2004), job performance (Piccolo, Greenbaum, Den Hartog, & Folger, 2010), and most importantly employee well-being (Kalshoven & Boon, 2012).

### **Employee Psychological Well-Being**

Work-related psychological well-being<sup>1</sup> is one factor that has previously been associated with ethical leadership (MacIntyre, Charbonneau, & O'Keefe, 2013), yet research into this connection is scarce. Psychological well-being describes an affective state in which arousal and pleasure are combined (Warr, 1987). More specifically, work-related well-being combines elements of satisfaction, arousal, tension, and depression to describe the overall quality of an employee's experience at work (Grebner, Semmer, & Elfrering, 2005; Warr, 1987).

Indeed, poor employee well-being has been found to negatively contribute to corporate functioning (Kalshoven & Boon, 2012). Some ways by which poor well-being has been found to affect organizational performance is through decreased employee productivity, increased low(er)-quality decision-making and a rise in work-absenteeism (Danna & Griffin, 1999). These findings are supported by the occupational health model (Cotton & Hart, 2003), which states that employee well-being is strongly linked to the health, and thus performance of an organization. Similarly, Page and Vella-Brodrick (2008) claim that employee well-being and the health of an organization is always connected through the well-being-performance and the well-being-retention link. Essentially, these links summarize the results of multiple studies that found work-

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<sup>1</sup> Hereinafter also referred to as employee well-being.

related well-being to be positively related to job performance (Kalshoven & Boon, 2012; Page & Vella-Brodrick, 2008; Wright & Cropanzano, 1997) and retention (Page & Vella-Brodrick, 2008; Wright & Bonett, 2007).

### **Work-Related Stress**

One concept that is often closely connected to psychological well-being is the concept of stress, as previous research found stress to be inversely related to subjective well-being (Ritchie, Sedikides, Wildschut, Arndt, & Gidron, 2011). Thus naturally, high stress is associated with many of the same negative outcomes that result from poor well-being. For example, work-related stress has been found to be connected to decreased productivity and employee job performance (Fredrickson, 2002; Piccolo et al., 2010; Wright & Cropanzano, 1997; Wright & Cropanzano, 2000). Additionally, it has been associated with higher levels of absenteeism and presentism<sup>2</sup> (Commission, 2002; EU-OSHA, 2014), as well as employee turnover (Danna & Griffin, 1999; EU-OSHA, 2014; Jain, Giga, & Cooper, 2013; Page & Vella-Brodrick, 2008; Wright & Bonett, 2007). Therefore, employee psychological well-being and work-related stress are treated as inversely interrelated concepts in the present paper.

### **Linking Ethical Leadership to Employee Psychological Well-Being**

Counterbalancing the changes in the business environment, companies' interests in employee well-being have increased over the past few years. Consequently, research about the antecedents and contextual factors that foster and facilitate high levels of employee well-being has increased. Ethical leadership has been identified as one such facilitating factor as it was found to be positively related to well-being (Kalshoven & Boon, 2012; MacIntyre et al., 2013).

One explanation for the relationship between ethical leadership and employee well-being is offered by the Conservation of Resource Theory (COR; Hobfoll, 1989). This theory proposes that employee well-being is enhanced through the availability of specific job resources, such as emotional support, or role clarification. As given by the definition, ethical leaders demonstrate and promote normatively appropriate conduct (Brown et al., 2005), thereby clarifying employee roles, as well as offering moral support and guidance. This provides followers with an increased amount of resources that allow them to better cope with stress (Harvey, Harris, Kacmar, Buckless, & Pescosolido, 2014) and thus increase or maintain a high level of well-being.

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<sup>2</sup> Presentism describes an employee's reduced performance at work due to health issues (EU-OSHA, 2014).

Other explanations for the relationship between ethical leadership and employee well-being are provided by the social exchange theory (Emerson, 1976) and the social learning theory (Bandura, 1977), as well as the identity-uncertainty theory (Hogg, 2007). Social exchange theory proposes that individuals interact by reciprocating each other's actions. Hence, it may be suggested that as long as a leader acts ethically, employees will reciprocate the moral conduct demonstrated by the ethical leader (Bedi et al., 2015; van Gils et al., 2015). Moreover, one of the defining aspects of ethical leadership is that the leader is fair, honest and cares about the well-being of his or her followers (Bedi et al., 2015). It is believed that the reciprocation of such attributes creates an ethical environment and fosters high-quality relationships between ethical leaders and their subordinates (e.g. Bedi et al., 2015; Kalshoven & Boon, 2012). Ethical leaders can utilize these high-quality relationships to increase the likelihood of reciprocity of ethical leadership and provide further guidance for what is expected of the employees within the relationship and at the workplace (Brown & Treviño, 2006; van Gils et al., 2015). Additionally, the positive climate and guidance decreases followers' levels of uncertainty, which is associated with decreased levels of stress and thus increased levels of well-being (Fredrickson, 2002; Ritchie et al., 2011).

Furthermore, social learning theory (Bandura, 1977) also provides an explanation for how ethical leadership can reduce uncertainty and thus stress levels, increasing employee well-being. Ethical leaders are often conceptualized as mentors that act as credible role-models for employees (Brown & Treviño, 2006). According to the definition by Brown et al. (2005, p.120), ethical leaders demonstrate and communicate clear norms and ethical values to the employees. This is likely to reduce uncertainty among employees about how to act or how to make decisions in the organization. Again, as a reduction of uncertainty is positively related to well-being (Fredrickson, 2002; Ritchie et al., 2011), ethical leadership is proposed to be as well. Remarkably, uncertainty reduction through social learning works in an upward spiral. The clearer and more frequently ethical leaders demonstrate and communicate high ethical standards, the more credible and attractive they become as role models (Brown et al., 2005).

Based on these theories, the present study proposes that the concepts of ethical leadership and employee well-being are related. It is expected that the main effect found in Kalshoven and Boon (2012) and Bedi et al. (2015) will be replicated in the present study.

*Hypothesis 1. Ethical leadership is positively related to employee well-being.*

## **Organizational Identification**

Additional to the direct relationship between ethical leadership and employee well-being, the present paper proposes that this relationship is also mediated by organizational identification. Group identification is motivated by a variety of objectives, as individuals aim to belong to a strong and salient collective to, among other things, self-enhance and reduce uncertainty (Hogg, 2007; Hogg & Terry, 2000; van Knippenberg & Hogg, 2003).

However the individual's objective for identification with a collective, social identity theory (Tajfel, 1959, 1969) forms the basis for organizational identification, a specific form of group identification. Tajfel (1972) defines social identity as an individual's notion of belonging to different social groups, for which the memberships hold emotional or value significance to the individual. This means that individuals conceptualize themselves in relation to other people in an intergroup context. This intergroup context consists of the division of the social group into 'in-groups' and 'out-groups', which are defined through prototypes (Hogg, 2001; Hogg, 2007). Overall, the social identity perspective argues that group identification follows from the two interrelated core processes of self-categorization (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) and depersonalization (Hogg, 2001; Turner et al., 1987). Essentially, self-categorization describes the process of an individual cognitively categorizing the self and others into in-group and out-group (Hogg & Terry, 2000). Thus, self-categorization amplifies the differences between in-group and out-group members by emphasizing the group's prototypes, which in this case would be the shared ethical values. Furthermore, the process of depersonalization is closely related to self-categorization. Depersonalization describes the effect that assimilating to the group's prototypes has on the individual. In essence, as individuals integrate into the group by adapting to the prototypes individuals are no longer viewed as unique, but as part of the collective (Hogg, 2001). Hence, after the process of depersonalization, whatever the collective does or experiences is perceived by the individual as concerning the self (van Knippenberg & Hogg, 2003).

Both the self-categorization and depersonalization process are based on the presence of clear and distinct prototypes for individuals to assimilate to. Prototypes describe specific sets of properties that represent the distinctive behavior and attitudes of a group, which distinguishes it from other groups (Hogg, 2001; Hogg, 2007). Thus, a prototype may take the form of specific behavior, language, looks, or values that are usually expressed and shared by all group members.

In this context, De Cremer and Van Knippenberg (2002) discovered that prototypical leaders that demonstrate group-oriented behavior were positively related to follower organizational identification. Ethical leaders are prototypical leaders as they are altruistic, group-oriented, honest, fair, and share their ethical values with the collective (e.g. Brown & Treviño, 2006). As the prototypes that have been linked to increased identification all apply to ethical leadership, it may be proposed that ethical leadership facilitates organizational identification.

Identification with a leader and/or collective has been associated with multiple positive outcomes. Individuals who strongly identify with their organization have reported increased levels of trust in the actions of their colleagues and leader (van Knippenberg & Hogg, 2003). Organizational identification has also been associated with increased levels of intrinsic motivation and therefore exertion of proportionally more effort on behalf of the company (van Knippenberg & Hogg, 2003) to achieve organizational goals (van Gils et al., 2015). Moreover, organizational identification has also been related to an increase in the individual's self-esteem (Hogg, 2007). Both, increased levels of intrinsic motivation and self-esteem, have been associated with increased levels of employee well-being (Wegge, Van Dick, Fisher, Wecking, & Moltzen, 2006). Additionally, group identification has also been found to reduce uncertainty as the individual feels reassured by sharing values and characteristics with the group (Hogg, 2007). As reduced level of self-relevant uncertainty also increases follower well-being (Ritchie et al., 2011), organizational identification can hence also be linked to employee well-being.

Therefore, based on the social identity theory, organizational identification is proposed to take on a mediating role for the relationship between ethical leadership and employee well-being. The role of organizational identification as a mediator will be tested in form of hypothesis 2.

***Hypothesis 2.*** Employees' *organizational identification* mediates the relationship between *ethical leadership and employee well-being*.

### **Moral Uncertainty**

Generally, the direct and/or mediated relationship between ethical leadership and employee well-being is likely to differ for every individual. Variations in the relationship may be caused by the influences of different moderating variables. One such moderating factor may be the concept of *moral uncertainty*, which was developed as part of the present research, based on the argument

that moral uncertainty moderates the (mediated) relationship between ethical leadership and employee well-being.

Moral uncertainty is defined as an individual's understanding, clarity and confidence of and in their moral values and standards. Individuals with low moral uncertainty<sup>3</sup> have a high level of clarity of their moral values. These individuals are thus confident that they know how to act in certain situations, and that their action will be in accordance with their moral values. In contrast, individuals with high moral uncertainty have a low level of clarity of their moral values. These individuals are thus insecure about how to act in certain situation, and unsure whether their actions will be in accordance with their moral values. Given this definition, it is proposed that individuals with very low and very high levels of moral uncertainty will respond strongest to ethical leadership by expressing high levels of well-being and low levels of stress.

The definition of moral uncertainty is grounded in the uncertainty-identity theory (Hogg, 2001; Hogg, 2007; Hogg & Terry, 2000). As implied by the name, the uncertainty-identity theory builds on the social identity theory (Tajfel, 1959, 1969) and hence the concept of self-categorization and depersonalization (Turner et al., 1987). Both the social identity theory (Tajfel, 1959, 1969) and uncertainty-identity theory (Hogg, 2007) argue that uncertainty reduction is one of the most common motivators of human action. Based on this, the uncertainty-identity theory further states that individuals specifically dislike feeling uncertain about themselves, including their values and attitudes and are thus motivated to reduce their discomfort by reducing the level of perceived uncertainty (Hogg, 2007; Hogg & Terry, 2000). Furthermore, the social identity theory and the uncertainty-identity theory both propose group identification to be the most efficient way for individuals to reduce uncertainty. It is hence argued that employees' levels of moral uncertainty primarily interact with ethical leadership and employee well-being through group identification (Hogg, 2007), in this case organizational identification.

### **Distinguishing Moral Uncertainty from Moral Identity**

To fully understand the construct of moral uncertainty it is important to differentiate it from similar psychological constructs, such as moral identity (Aquino & Reed, 2002). One of the main differences between moral uncertainty and moral identity is found in the underlying theories of the constructs. Neither of the two constructs measure and/or categorize what the moral viewpoint

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<sup>3</sup> Low moral uncertainty is equivalent to high moral clarity and vice versa.

of the individual is; instead moral uncertainty focuses on how certain an individual is about his/her moral values and moral identity focuses on how important or central morality is to the individual's self-schema (Aquino & Reed, 2002). Furthermore, moral identity describes how individuals link their different social identities to the self to construe their self-conception (Markus, 1977). Generally, individuals are believed to organize part of their self-conception around moral values and traits, making moral identity part of their social self-schema, i.e., their social identity (Aquino & Reed, 2002). However, individuals differ in the importance they give to their various social identities, i.e., how central a specific identity is to the self-concept, and thus how influential it is on the individual's behavior (Aquino & Reed, 2002). Hence, moral identity theory suggests that the more important morality is for the individual's self-concept, the more ethically he/she will act (Aquino & Reed, 2002). Differently, moral uncertainty does not aim to predict an individual's actions based on the make-up of their self-schema. Instead, moral uncertainty focuses on capturing how certain, clear, and confident an individual is about their moral viewpoint, i.e., if they know what they stand for morally and what they perceive as morally 'right' and 'wrong'. Considering that uncertainty is generally experienced as aversive (Grant & Hogg, 2012) the concept of moral uncertainty proposes that individuals' actions will partly be motivated by the need to reduce or maintain levels of moral uncertainty.

Indeed, the only link between moral uncertainty and moral identity is provided by the motivated tactician model (Gollwitzer & Bargh, 1996; Hogg, 2007). This model states that individuals only aspire to reduce uncertainty for aspects that are important to the self. Research on moral identity has found that, to some extent, all individuals base their social identification and self-definition on moral identity (Aquino & Reed, 2002). This exemplifies that, although individuals may vary in the extent to which moral identity is part of their self-definition, the concept of morality is always self-relevant. Hence, the motivated tactician model of social cognition (Gollwitzer & Bargh, 1996; Hogg, 2007) links the concepts of moral identity and uncertainty as it can be argued that individuals will always try to reduce uncertainty related to their morals, i.e., moral uncertainty. Ultimately, the only connection between the constructs thus lies in the fact that moral identity serves to explain the importance and relevance of creating a construct measuring moral uncertainty.

It may therefore be concluded that the constructs of moral uncertainty and moral identity stand separate from each other as they are based on different theories and serve different

purposes. It is thus of interest to create and include a new construct, moral uncertainty, in the research model as a potential moderator of the relationship between ethical leadership and employee well-being, as well as between ethical leadership and organizational identification. Nevertheless, moral identity will also be included in the research model, so that the concepts can also be statistically disentangled.

### **Research Model**

In summary, this study predicts that ethical leadership positively influences employee well-being. Moreover, it is predicted that organizational identification will act as a mediator between ethical leadership and employee well-being, enhancing the positive effect. In addition, the individual's level of moral uncertainty is proposed to moderate the relationship between ethical leadership and employee well-being, as well as between ethical leadership and organizational identification. The present paper will thus also investigate the following assumption: Ethical leadership will positively influence organizational identification and/or employee well-being if the follower's level of moral uncertainty is high or low, but not if it is moderate.

It is proposed that individuals high in moral uncertainty, i.e., low in clarity, will be particularly receptive to ethical leadership. This is based on the idea that most people look at others for guidance and reassurance (Kohlberg, 1969; Trevino, 1986), which leads to the assumption that the more uncertain an individual is about his or her moral values, the more he or she will look for guidance. As ethical leaders provide moral guidance to their followers (Brown & Treviño, 2006), followers' moral uncertainty will decrease. Reductions or low levels of moral uncertainty are beneficial to employees as uncertainty has been found to be inversely related to psychological distress, such as work-related stress, and positively related to subjective well-being (Ritchie et al., 2011). Based on these findings, a positive relationship between ethical leadership and employee well-being, moderated by moral uncertainty, is thus proposed.

Furthermore, individuals with high moral uncertainty will also be more likely to identify with an organization that has strong ethical leadership. The main mechanisms by which organizational identification reduces uncertainty is through depersonalization and self-categorization (Hogg, 2007). Depersonalization describes the act of an individual assigning a group's pre-defined prototypical attributes, i.e., values and norms, to the self (Hogg, 2007). Assigning pre-defined prototypical attributes to the self decreases individuals' levels of uncertainty because individuals are reassured by the perception of sharing moral values with

their leader, peers, and the organization as a whole (Hogg, 2007; Hohman & Hogg, 2015). The sense of belonging is additionally strengthened through self-categorization. Indeed, it was found that the more concrete, focused and distinct the values, behaviors, and actions of the group and its members are defined, the more effectively uncertainty is reduced (Hogg, 2001) as this allows for the categorization of the self and others into in-groups and out-group. As organization defined by ethical leadership provide individuals with unambiguous ethical guidelines (Brown & Treviño, 2006), it is proposed that morally uncertain individuals will identify to reduce said self-relevant uncertainty.

Additionally, it may also be suggested that individuals with low levels of moral uncertainty, i.e., high levels of clarity, may also be particularly receptive to ethical leadership. In this case, it is proposed that individuals that have a clear understanding of their moral values will acknowledge the leader's demonstration of clear ethical values and feel reassured (Hogg, 2007; Kohlberg, 1969). In either case, it is assumed that individuals with low or high levels of uncertainty will both be influenced by ethical leadership to a greater extent than individuals with moderate levels of moral uncertainty. In cases of moderate moral uncertainty, moral stress or conflict may prevent ethical leadership from influencing follower well-being. These predictions form the basis for the third hypothesis. Figure 1 depicts the overall research model.

*Hypothesis 3. Employees' moral uncertainty moderates the mediated relationship between ethical leadership, identification, and employee well-being.*

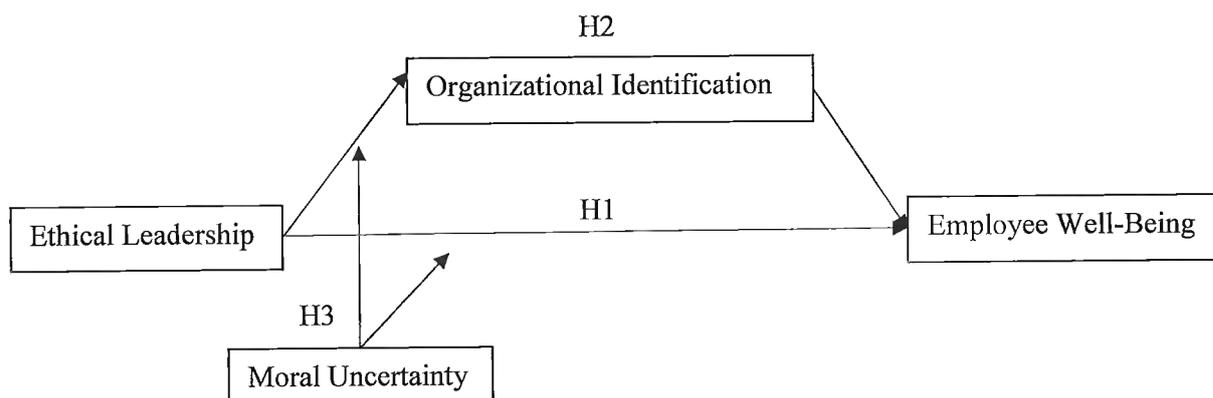


Figure 1. Research model displaying hypotheses to be tested.

## Methods

### Participants

109 individuals (62 male, 47 female) participated in the study. All participants were recruited online by the researcher and some participants were contacted directly, whereas others were recruited through company contacts. To partake, participants had to be employed full-time (97 participants) or part-time (12 participants) at a for-profit corporation. Almost half of the participants reportedly worked at a multinational corporation (47.7%), 15.6% at a large national business (over 1,000 employees), 26.6% at mid-sized business (between 100 – 999 employees), and only 10.1% worked in small businesses (less than 100 employees). Participants were 39.32 years old on average (SD = 11.63) and most participants were German (65.1%), British (11.9%), or from the U.S.A (10.1%). On average, participants had been with their current supervisor for 3.83 years (SD = 5.01). The majority of the participants reported to hold a bachelor's degree (30.3%), or a master's degree (49.5%).

### Design

Originally, the research model was to be tested in form of a longitudinal design, but because of the low participation rate for the follow-up questionnaire (21.1%), the research model was treated as a cross-sectional study instead. The study was in the form of a self-administered online questionnaire consisting of 65 questions. Participants were told that the study measures their work life, however, were not deceived and received a debriefing with specific information about the purpose of the study at the end of the first questionnaire. The study examined the relationship between the independent variable (followers' perception of *ethical leadership*) and dependent variables (*employee work-related well-being* and *stress*), mediated by the covariate *organizational identification*, and moderated by the covariate *moral uncertainty*.

### Procedure

The study was approved by Maastricht university's ethical committee. All potential participants received an E-Mail that invited them to participate in an online study about their work life, an indication of the duration of the study and a link to the questionnaire. After opening the link to the questionnaire, participants were given similar information about the procedure and the content of the questionnaire. Participants were informed that the questionnaire aims to collect

information about their work life. Next, participants were told that their information will be collected anonymously and be treated strictly confidentially. Furthermore, it was stated that participants are free to exit the questionnaire at any point in time. Finally, participants were informed about the estimated duration of the questionnaire and asked whether they wish to proceed. Participants had to actively indicate that they had read and understood the information presented to them before they were able to proceed to the first question page. A tracker indicated the participants' process throughout the entire questionnaire. Most questions were asked in a matrix format and short explanations were given before every question block. A scale measuring moral identity and an item measuring job insecurity were included as control variables to control for alternative explanations for the relationship between ethical leadership and employee well-being. At the end of the questionnaire participants were asked about their work life (size of company, tenure with current supervisor, number of sick days in last month) as well as some basic demographic questions (gender, age, nationality, highest degree obtained).

After completion of the questionnaire participants were thanked for their participation and shortly debriefed. The debriefing explained that the purpose of the study was to measure how ethical leadership influences organizational identification, as well as the employee's well-being and stress level. Finally, participants could sign up for the follow-up questionnaire that was sent to them approximately two weeks after the completion of the first questionnaire. The follow-up questionnaire repeated the questions related to the participants well-being, stress level and demographic information.

## **Measures**

*Ethical Leadership.* Ethical leadership was measured using the Ethical Leadership Scale (ELS; Brown et al., 2005). The questionnaire consisted of ten items and measured on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). An example item is: "My leader disciplines employees who violate ethical standards". The questionnaire was reliable ( $\alpha = .93$ ). Please see Appendix 1 for all items of the questionnaire.

*Organizational Identification.* Organizational identification was measured using the Organizational Identification Scale (OLS) developed by Mael and Ashforth (1992). The questionnaire consisted of six items and was measured on a five-point scale ranging from 1 (strongly agree) to 5 (strongly disagree). In order to align with the other scales, the 5-point scale

was reversed, i.e., 1 (strongly disagree) to 5 (strongly agree). An example item is: “When someone criticizes my organization, it feels like a personal insult”. The questionnaire was reliable ( $\alpha = .81$ ). Please see Appendix 2 for all items of the questionnaire.

*Moral Uncertainty.* Moral uncertainty was measured using an adapted version of the Self-Concept Clarity Scale developed by Campbell et al. (1996). This scale was chosen as the basis for the moral uncertainty scale as in the present paper clarity is interpreted as the exact opposite to uncertainty. The original questionnaire consisted of twelve items and was measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Based on the phrasing of the questions, only eleven items were adapted to ask about moral uncertainty instead of self-concept clarity. An example item of the adapted version is: “It is often hard for me to make up my mind about things, because I don’t really know what my moral values are”. Based on an explanatory factor analysis (varimax), the number of items in the questionnaire was reduced from twelve items to six items. All analysis was performed using the reduced version of the questionnaire containing only six items. This six-item scale was reliable ( $\alpha = .71$ ). Please see Appendix 3 for all adapted items of the questionnaire.

*Moral Identity.* Moral identity was measured using a scale developed by Aquino and Reed (2002). This scale was included as a control variable so that the difference between moral identity and the new construct of moral uncertainty could be established. The questionnaire consisted of a thirteen-item scale and was measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). All items refer to 9 characteristics of a moral person: ‘caring, compassionate, fair, friendly, generous, hardworking, helpful, honest, kind’. An example item is: “It would make me feel good to be a person who has these characteristics.” The questionnaire was reliable ( $\alpha = .80$ ). Please see Appendix 4 for all items of the questionnaire.

*Employee Well-Being.* Employee well-being was measured using a scale developed by Warr (1990). The questionnaire consisted of twelve items and was measured on a six-point scale with the responses: never (1), occasionally (2), some of the time (3), much of the time (4), most of the time (5), all of the time (6). The twelve items were divided into two scales: anxiety-contentment and depression-enthusiasm. The scales consist of six positive items (comfortable, calm, relaxed, motivated, enthusiastic and optimistic) and six negative items (tense, anxious, worried, depressed, melancholic and unhappy), so that the six negative items were reversed

before analysis. All items were preceded by the question: “In the past few weeks, to what extent has your job made you feel...?”. The questionnaire was reliable ( $\alpha = .87$ ). Please see Appendix 5 for all items of the questionnaire.

*Work-Related Stress.* Employee work-related stress levels was measured using the perceived stress scale developed by Cohen and Williamson (1988). The short version of the questionnaire was used, which consisted of four items and was measured on a five-point scale ranging from 1 (never) to 5 (very often). An example item is: “In the last month, how often have you felt that you were unable to control the important things in your life?”. Analysis found the questionnaire had a Cronbach’s alpha value of  $\alpha = .57$ . Considering that the short version of the scale only contains four items, it may be argued that  $\alpha = .57$  is still an acceptable level of reliability (Field, 2013, p.709). Yet, as the alpha value lies clearly under the benchmark of  $\alpha = .70$ , the present study considers the perceived stress scale to be unreliable. Please see Appendix 6 for all items of the questionnaire.

*Job Insecurity.* Short-term job insecurity was measured using an one-item measure developed by De Witte (1999). This one-item scale asked participants to rate “How large, in your opinion, is the probability that you will become unemployed in the near future?” on a five-point scale ranging from 1 (very large) to 5 (very small or impossible). Job insecurity has been found to affect individuals’ psychological well-being (De Witte, 1999), and was therefore included as a control measure. Please see Appendix 7 for more information on this one-item scale.

*Work-life Questions.* Participants were asked if they are currently employed full-time or part-time. Additionally, participants were asked how long they have worked for their current direct supervisor. Finally, they were asked about the size of the company they work for and how many days of sick leave they have taken in the last six months.

*Demographic Measures.* Finally, participants were asked about their demographic information. This encompassed questions about their gender, age, nationality, and level of education.

## Results

### Scale Testing

Data was collected from 13.04.2017 to 15.06.2017 and later analyzed using IBM SPSS Statistics for Windows, version 24 (IBM Corp., Armonk, N.Y., USA). The data was prepared for analysis by reversing necessary scale items and deleting all incomplete responses.

First, a principal axis factor analysis with orthogonal rotation (varimax) was performed on the moral uncertainty scale. The factor analysis was calculated for this scale specifically because, although it was based on a pre-existing scale, this adapted version of the scale had never been used to measure moral uncertainty. Consequently, the factor analysis was performed to test the explanatory power of the 11-item moral uncertainty scale that was created, based on the 12-item self-concept clarity scale (Campbell et al., 1996). The sampling adequacy was verified by a Kaiser-Meyer-Olkin (KMO) measure of .78, which is described as 'middling' and almost at the level of 'meritorious' (Hutcheson & Sofroniou, 1999). Additionally, all diagonal anti-image numbers were above the acceptable limit of .50 (Field, 2013). Hence, the factor analysis that was run demonstrated informative value.

Thus, an eigenvalue analysis was run, which found that four factors had eigenvalues above the Kaiser's criterion of 1. In combination, these four factors explained 62.90 % of the variance. Remarkably, factor 1 alone had an eigenvalue of 3.39 and explained 30.74% of the variance, making it the main factor. Based on the items clustered on the factors, factor 1 represented the individuals' uncertainty about the knowledge of, and confidence in their moral values, as well as the consistency of these moral values. Factor 2 seemed to represent moral values regarding other people, i.e., whether the individuals know the moral values of others or would be willing to share his/her own moral values with others. Items clustered on factor 3 were too ambiguous to identify a specific theme, ranging from conflicting moral opinions and time spent wondering about moral values to doubts about the moral values of the past. Finally, factor 4 was only related to one high-loading item that, considering the phrasing of this item in relation to the responses that were possible, may have been misinterpreted. Overall, the factor analysis thus resulted in a reduction of the moral uncertainty scale to consist only of the six items that loaded onto the first factor as this factor proved to best capture the concept of moral uncertainty. Although the reduction of the moral uncertainty scale caused it to show positive skew ( $z = 3.29$ )

and positive kurtosis ( $z = 3.28$ ), it also increased the scales reliability to  $\alpha = .71$ . The rotated factor loadings, eigenvalues, and percentage of variance explained by each factor are presented in table 1.

**Table 1.** Summary of the exploratory factor analysis results for the moral uncertainty scale.

	Rotated Factor Loading			
	Factor 1. Moral Uncertainty	Factor 2. Other People	Factor 3. Ambiguous Topics	Factor 4. Conflicting Moral Values
If I were asked to describe my moral values, my descriptions might end up being different from one day to another.	.71			
My beliefs about morality (i.e. what is moral and what is not moral) often conflict with one another.	.69			
It is often hard for me to make up my mind about things, because I don't really know what my moral values are.	.64			
Sometimes I know other people's moral values better than my own.	.46	.33		
On one day I might have one opinion of my moral values and on another day I might have a different opinion.	.40			
In general, I have a clear sense of who I am and what my moral values are. (reversed)	.31			
When I think about my moral values of the past, I am not sure what my moral values were really like.		.62	.41	
Even if I wanted to I don't think I would tell someone what moral viewpoint I really hold.		.60		
I spend a lot of time wondering about what my moral values really are.			.68	
My beliefs about morality (i.e., what is moral and what is not moral) often conflict with one another.			.45	
I seldom experience conflict between the different aspects of my moral opinion.				.82
<b>Eigenvalues</b>	3.39	1.31	1.17	1.06
<b>% of variance</b>	30.74	11.88	10.65	9.63

Note. N=109, Reliability of six-item moral uncertainty scale is  $\alpha = .71$ .

## General Analysis

Next, the means, standard deviations and Cronbach's alphas were calculated for all scales (see table 2). The Cronbach's alphas ranged from  $\alpha = .71$  (moral uncertainty) to  $\alpha = .93$  (ethical leadership), with the only exception being the employee stress scale ( $\alpha = .57$ ). Overall, the Cronbach's alphas were interpreted in terms of the number of items in each specific scale and hence all scales, except the employee stress scale, were found to demonstrate acceptable levels of reliability (Field, 2013). This allowed for informative conclusions to be drawn from subsequent analyses.

Furthermore, analysis of the general descriptive statistics of each scale generated some noteworthy insights. For example, as expected the measurements for ethical leadership were negatively skewed ( $z = -4.00$ ) and had a high mean value ( $M = 5.18/7$ ). This indicates that respondents generally rated their direct supervisor as 'above average' ethical leaders, so that even 'low' ethical leaders still had a relatively high rating. Interestingly, the opposite effect was found for the moral uncertainty scale, which was positively skewed ( $z(s)^4 = 3.29$ ), indicating a floor effect due to the overall low levels of moral uncertainty ( $M = 1.80/5$ ). Additionally, this scale also demonstrated positive kurtosis ( $z(k)^5 = 3.28$ ), i.e., most respondents indicated low levels of moral uncertainty, except for several extreme cases. Meanwhile, the moral identity scale only displayed positive kurtosis ( $z(k) = 3.04$ ), indicating that besides the majority of similar, slightly positive ( $M = 3.67/5$ ) responses, several outliers must be present. Finally, it is mentionable that job insecurity ( $M = 1.89/5$ ;  $z(s) = 4.44$ ) was positively skewed, as were the measures of tenure with the direct supervisor ( $M = 4.11$  years;  $z(s) = 6.11$ ;  $z(k) = 4.97$ ) and number of days on sick leave in the last month ( $M = 2.36$ ;  $z(s) = 15.70$ ;  $z(k) = 35.21$ ), which also showed negative kurtosis. Yet, all three measures had low mean-values, demonstrating that the overall job insecurity and number of sick days were low, and that only few outliers deviated from this by indicating disproportionately high values.

Moreover, Pearson's correlation coefficients were calculated for all variables of the research model and all control variables. As expected, ethical leadership and employee well-being were found to significantly correlate ( $\alpha = .60$ ,  $p = .000$ ). Indeed, the correlation of the two variables of the main effect was the highest one. Additionally, significant correlations were

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<sup>4</sup>  $z(s)$  indicates the z-value of skewness.

<sup>5</sup>  $z(k)$  indicates the z-value of kurtosis.

found between ethical leadership and organizational identification ( $\alpha = .39, p = .000$ ), ethical leadership and moral identity ( $\alpha = .20, p = .039$ ), as well as ethical leadership and employee stress ( $\alpha = -.22, p = .023$ ). This supports the general research model as the independent variable (ethical leadership) correlates with the outcome variables (employee well-being and stress), as well as the mediator (organizational identification). Furthermore, no correlation was found between ethical leadership and the moderator moral uncertainty ( $\alpha = .11, p = .242$ ). However, a significant low to moderate negative correlation was identified between moral uncertainty and moral identity ( $\alpha = -.24, p = .026$ ), suggesting that these two constructs are slightly related. Yet, this correlation was only found for the reduced six-item moral uncertainty scale and not for the long eleven-item moral uncertainty scale, so that it may be argued that moral uncertainty and moral identity are related, yet separate constructs. Moreover, it must be noted that moral uncertainty and moral identity only showed weak correlation. Nevertheless, moral identity was included as a control variable in further analysis. Finally, the significant negative correlation between employee well-being and employee stress ( $\alpha = -.36, p = .000$ ) supports the proposal that these two variables are inversely related. Furthermore, the significant correlations between job insecurity and employee well-being ( $\alpha = -.30, p = .001$ ), as well as job insecurity and employee stress ( $\alpha = .31, p = .001$ ) support the argument for including job insecurity as a control variable. A summary of the means, standard deviations, correlations and Cronbach's alphas of all scales are presented in Table 2.

**Table 2.** Means, SD, correlations, and Cronbach's alphas for main variables and controls.

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. Ethical leadership (EL)	5.18	1.20	(.93)						
2. Organizational identification (OI)	3.84	0.66	.39**	(.81)					
3. Moral uncertainty (M.UC)	1.80	0.53	.11	-0.1	(.71)				
4. Moral identity (MI)	3.67	0.49	.20*	.29**	-.21*	(.80)			
5. Employee well-being (E.WB)	4.15	0.79	.56*	.36**	.06	.08	(.87)		
6. Employee stress (E.S)	2.45	0.63	-.22*	-.16	.19	-.02	-.36**	(.57)	
7. Job insecurity (JI)	1.89	0.95	-0.16	-.08	.19*	.01	-.30**	.31**	(n/a)

*Note.* N = 109. Cronbach's alphas are represented between brackets on the main diagonal. EL scores ranged from 1 to 7; E.WB scores ranged from 1 to 6; OI, M.UC, MI, E.S and JI scores ranged from 1 to 5.

\*\*Correlation significant at  $p < .01$ ; \*Correlation significant at  $p < .05$ .

## Hypotheses Testing

To test the hypotheses, regression analysis was conducted to identify the relationships between the different variables in the research model. Additionally, the mediation effect of organizational identification was tested using the PROCESS utility in SPSS (Hayes, 2013). This macro was also used to analyze the moderation effect of moral uncertainty, employing bootstrapping and the Johnson-Neyman method. To prevent possible issues of multicollinearity, all calculations were done using standardized scores (Aiken, West, & Reno, 1991).

The first hypothesis stated that ethical leadership would be positively related to employee well-being. To understand the direct effect of ethical leadership on employee well-being a linear regression analysis was conducted. Before running and analyzing the regression analysis some basic assumptions were tested. To assess linearity a scatterplot of ethical leadership against employee well-being was plotted. Visual inspection of this scatterplot indicated a linear relationship between the two variables. Homoscedasticity was assessed by the visual inspection of a plot of standardized residuals against the standardized predicted values. Moreover, the residuals were normally distributed, as assessed by a visual inspection of a normal probability plot. The Durbin-Watson statistic value of 1.95 also confirmed independence of residuals. As all assumptions were met, a linear regression was run with ethical leadership as the independent variable and employee well-being as the dependent variable.

Ethical leadership accounted for 31.3% of the variation in employee well-being with an adjusted  $R^2 = 30.6\%$ . This is a medium size effect according to Cohen (1988). Moreover, ethical leadership significantly predicted employee well-being, with  $\beta = 0.56$ ,  $t(107) = 6.98$ ,  $p = .000$ . Based on this result hypothesis 1 is fully supported as ethical leadership is positively related to employee well-being. Moreover, ethical leadership was also found to significantly predict organizational identification, ( $\beta = 0.39$ ,  $t(107) = 4.33$ ,  $p = .000$ ). Ethical leadership accounted for 15.0% of the variance in organizational identification, with an adjusted  $R^2 = 14.1\%$ . See table 3 below for values.

**Table 3.** *Linear Regression Analysis of the Coefficient Ethical Leadership*

	<i>beta</i>	<i>t</i>	<i>95% CI</i>	
			<i>Lower</i>	<i>Upper</i>
Employee well-being	0.56	6.98	0.400	0.718
Organizational identification	0.39	4.33	0.209	0.563
Employee stress	no effect			

Note. N = 109

Employee well-being:  $R^2 = 0.31$ ,  $F = 48.65$

Organizational identification:  $R^2 = 0.15$ ,  $F = 18.71$

Additionally, a linear regression analysis was also run to assess the relationship between organizational identification and employee well-being. Organizational identification accounted for 13.0% of the variation in employee well-being, with an adjusted  $R^2 = 12.1\%$ . Thus, like ethical leadership, organizational identification also significantly predicted employee well-being ( $\beta = 0.36$ ,  $t(107) = 3.99$ ,  $p = .000$ ). See table 4 below for values.

**Table 4.** *Linear Regression Analysis for the Coefficient Organizational Identification*

	<i>beta</i>	<i>t</i>	<i>95% CI</i>	
			<i>Lower</i>	<i>Upper</i>
Employee well-being	0.36	3.99	0.181	0.539
Employee stress	no effect			

Note. N = 109,  $R^2 = 0.13$ ,  $F = 15.92$

The relationship between ethical leadership and employee stress, as well as organizational identification and employee stress, could not be analyzed using linear regression because linearity could not be established between these two variables. Additionally, it must be mentioned that all regressions were also run including the control variables and no major differences were detected.

The second hypothesis stated that the employees' level of organizational identification would mediate the relationship between ethical leadership and employee well-being. The mediation analysis function within the PROCESS utility (v.2.16) in IBM SPSS (Hayes, 2013) was used to investigate whether organizational identification did indeed play a mediating role in the relationship between ethical leadership and employee well-being. Again, mediation analysis was run twice. Once the mediation was calculated only for the main variables of the research model, a second time the analysis was run including job insecurity as the control variable. As the

results showed no major differences the numbers of the first mediation analysis, excluding the control variable, are reported below.

Overall, the model is of informative value, as it explains 58.05% of the variance in employee well-being. Additionally, the beta values for all relationships were positive. Hence, it can already be concluded that there is a positive relationship between ethical leadership, organizational identification, and employee well-being.

First, the PROCESS utility repeats linear regression analyses between ethical leadership, organizational identification, and employee well-being. The regression analysis of the mediation analysis output clearly shows that ethical leadership significantly predicts organizational identification,  $b = 0.39$ ,  $t(107) = 4.33$ ,  $p = .000$ . Additionally, organizational identification also predicts employee well-being,  $b = 0.17$ ,  $t(106) = 1.98$ ,  $p = .051$ , when controlling for ethical leadership. Yet, although this relationship is not significant, organizational identification does appear to have a meaningful effect on employee well-being.

Next, the relationship between the independent variable of the model (ethical leadership) and the outcome variable (employee well-being) was assessed including organizational identification as the mediator in the model. This analysis found a significant indirect effect of ethical leadership on employee well-being through organizational identification,  $b = 0.07$ , CI 95% [0.011, 0.142]. Moreover, when including organizational identification in the model, a significant direct effect of ethical leadership on employee well-being was identified,  $b = 0.49$ ,  $t(107) = 5.76$ ,  $p = .000$ . Based on these findings, hypothesis 2 is thus fully supported.

Moreover, calculating the total effect of the relationship between ethical leadership and employee well-being, excluding organizational identification, also gives a significant result,  $b = 0.559$ ,  $t(107) = 6.98$ ,  $p = .000$ . Interestingly, the b-value for the total effect (excluding organizational identification) is higher than the direct effect (including organizational identification)<sup>6</sup>. Again, this suggests that organizational identification does indeed mediate the relationship of ethical leadership and employee well-being. Consequently, it can be concluded that hypothesis 2 is supported as some of the variance is absorbed by organizational identification as a mediator. The values of the mediation analysis are displayed in table 5 and figure 2.

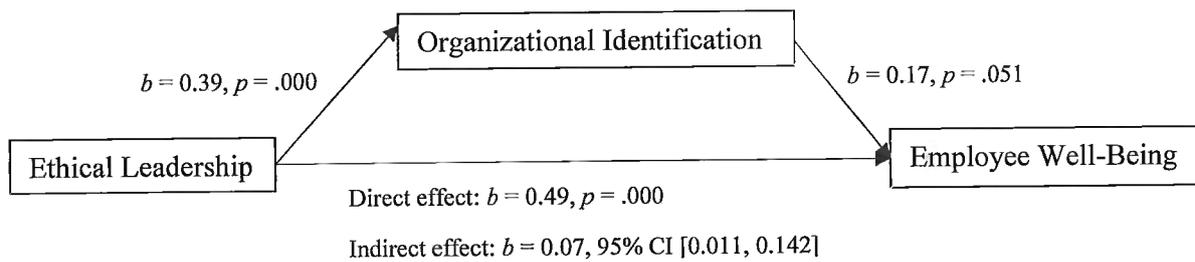
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<sup>6</sup> total effect = 0.56 > direct effect = 0.49

**Table 5.** Mediation analysis with employee well-being as dependent variable, organizational identification as mediator, and ethical leadership as independent variable.

	<i>b</i>	SE <i>b</i>	<i>t</i>	<i>p</i>	95% CI		<i>R</i> <sup>2</sup>
					Lower	Upper	
<b>Organizational identification model</b>							
Ethical leadership	0.39	0.09	4.33	.000			0.15
<b>Employee well-being model</b>							
Organizational identification	0.17	0.09	1.98	.051			0.34
Ethical leadership	0.49	0.09	5.76	.000			0.31
Total effect	0.56	0.08	6.98	.000			0.31
<b>Indirect effect</b>							
Organizational identification	0.07	0.03			0.011	0.142	

Note. N = 109



*Figure 2.* Model of ethical leadership as a predictor of employee well-being, mediated by organizational identification.

The third and final hypothesis stated that employee level of moral uncertainty would moderate the mediated relationship between ethical leadership, organizational identification, and employee well-being. The moderation effect of moral uncertainty, proposed by hypothesis 3, was tested using the moderation analysis function within the PROCESS utility (Hayes, 2013), including the output for the Johnson-Neyman method. Additionally, linear regression analysis including the mean centered interaction terms was run. As it gave almost identical results, only the PROCESS utility output is discussed below. Moreover, the analysis was also run including moral identity as a control variable. Again, as the results showed no major differences the numbers of the original analysis, without the control variable, are reported below.

The first analysis was run to examine the moderating effect of moral uncertainty on the relationship between ethical leadership and employee well-being. The analysis was run with ethical leadership as the independent variable, employee well-being as the dependent variable, and moral uncertainty as the moderator (see table 6 and figure 3).

The overall model was significant,  $F(3,105) = 12.22, p = .000, R^2 = 0.31$ . Yet, moral uncertainty was found to be a non-significant predictor of employee well-being,  $b = -0.005, t(105) = -0.05, p = .960$ . Similarly, the interaction also yielded non-significant results,  $b = 0.05, t(105) = 0.39, p = .700$ . The only predictor that gave a significant result was ethical leadership,  $b = 0.58, t(105) = 5.86, p = .000$ . This means that for every unit increase in ethical leadership, there was a 0.58-unit increase in employee well-being, regardless of the level of moral uncertainty.

**Table 6.** Moderation analysis with employee well-being as dependent variable, ethical leadership as independent variable, and moral uncertainty as moderator.

	<i>b</i>	SE <i>b</i>	<i>t</i>	<i>p</i>	95% CI	
					Lower	Upper
Constant	-0.01	0.08	-0.07	.947	-0.164	0.153
Moral Uncertainty	-0.005	0.09	-0.05	.960	-0.184	0.174
Ethical Leadership	0.58	0.10	5.86	.000	0.386	0.781
Ethical Leadership x Moral Uncertainty	0.05	0.12	0.39	.700	-0.197	0.293

Note.  $N = 109, R^2 = .31$

Diving into the simple slopes analysis, the absence of the moderation effect becomes apparent. For low levels of moral uncertainty there is a significant positive relationship between ethical leadership and employee well-being,  $b = 0.54, t(105) = 4.06, p = .000, 95\% \text{ CI } [.274, .798]$ . Similarly, a significant positive relationship between ethical leadership and employee well-being of similar strength was detected for moderate levels of moral uncertainty,  $b = 0.58, t(105) = 5.86, p = .000, 95\% \text{ CI } [.386, .781]$ . Finally, this was also the case for high levels of moral uncertainty, for which a slightly stronger positive relationship was found between ethical leadership and employee well-being,  $b = 0.63, t(105) = 3.48, p = .001, 95\% \text{ CI } [.272, .991]$ . The fact that a significant positive effect of ethical leadership on employee well-being was present for all levels of moral uncertainty suggests that moral uncertainty did not moderate this relationship.

Furthermore, the Johnson-Neyman method output gives similar results. This output demonstrated that between -1.51 and 2.52 standard deviations from the mean for moral uncertainty, ethical leadership is significantly and positively related to employee well-being,  $b = 0.70$ ,  $t(105) = 1.98$ ,  $p = .050$ . Above this point ethical leadership and employee well-being are no longer significantly related.

These findings demonstrate an absence of a moderation effect as there is no change in the relationship between ethical leadership and employee well-being after including level of moral uncertainty in the equation. Thus, it seems like ethical leadership positively influences employee well-being, regardless of the employees' levels of moral uncertainty. Based on these findings, hypothesis 3 is thus not supported.

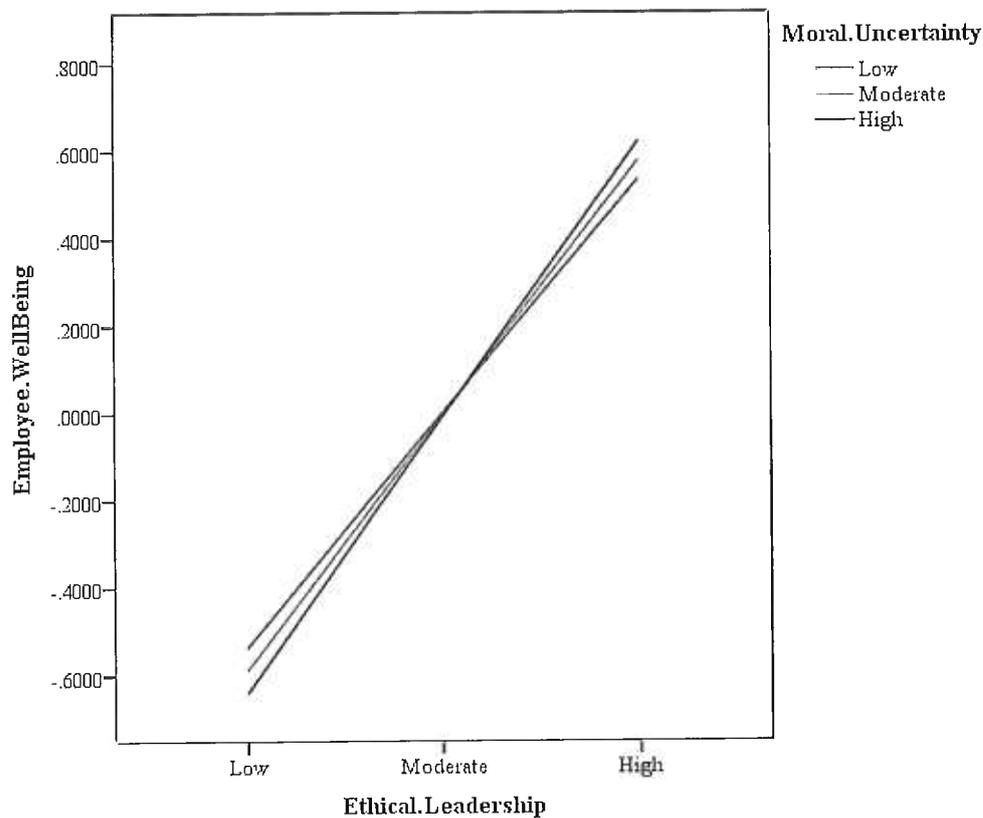


Figure 3. Graph of the relationship between ethical leadership and employee well-being, moderated by moral uncertainty.

Additionally, a moderation analysis was also generated to investigate the moderating effect of moral uncertainty on the relationship between ethical leadership and organizational identification, i.e., the mediator in the model. The analysis was run with ethical leadership as the independent variable, organizational identification as the dependent variable, and moral uncertainty as the moderator (see table 7 and figure 4).

The overall model was significant,  $F(3,105) = 11.38, p = .000, R^2 = .18$ . Nevertheless, moral uncertainty was found to be a non-significant predictor of organizational identification,  $b = -0.14, t(105) = -1.54, p = .127$ . Similar to the predictors of employee well-being, the interaction also yielded non-significant results,  $b = -0.12, t(105) = -1.18, p = .240$ . Again, the only predictor that gave a significant result was ethical leadership ( $b = 0.34, t(105) = 3.43, p = .001$ ), which means that for every one unit increase in ethical leadership there is a 0.34-unit increase in organizational identification.

**Table 7.** Moderation analysis with organizational identification as dependent variable, ethical leadership as independent variable, and moral uncertainty as moderator.

	<i>b</i>	SE <i>b</i>	<i>t</i>	<i>p</i>	95 % CI	
					Lower	Upper
Constant	0.01	0.09	0.15	.883	-0.164	0.191
Moral Uncertainty	-0.14	0.09	-1.54	.127	-0.317	0.040
Ethical Leadership	0.34	0.10	3.43	.001	-0.145	0.540
Ethical Leadership x Moral Uncertainty	-0.12	0.10	-1.18	.240	-0.314	0.080

**Note.** N = 109,  $R^2 = .18$

Moreover, to better interpret the interaction between ethical leadership and organizational identification considering the moderating effect of moral uncertainty levels, the simple slope output was examined. For low levels of moral uncertainty a significant positive relationship between ethical leadership and organizational identification was found,  $b = 0.46, t(105) = 5.50, p = .000, 95\% CI [.294, .625]$ . Similarly, a significant positive relationship between ethical leadership and organizational identification was found for moderate levels of moral uncertainty,  $b = 0.34, t(105) = 3.43, p = .001, 95\% CI [.145, .540]$ . Interestingly though, for high levels of moral uncertainty the relationship between ethical leadership and organizational identification was non-significant,  $b = .23, t(105) = 1.25, p = .215, 95\% CI [-.133, .583]$ .

The Johnson-Neyman output also shows that, when moral uncertainty levels are between -1.51 and 0.54, i.e., low and moderate, ethical leadership and organizational identification are significantly positively related,  $b = 0.28$ ,  $t(105) = 1.98$ ,  $p = .050$ . This means that for low and moderate levels of moral uncertainty, ethical leadership causes employees to identify with their organization. However, as moral uncertainty levels increase ethical leadership and organizational identification are no longer significantly related. This exemplifies that for high levels of moral uncertainty, ethical leadership does not cause an increase in the employees' organizational identification. Therefore, hypothesis 3 is not supported by the results.

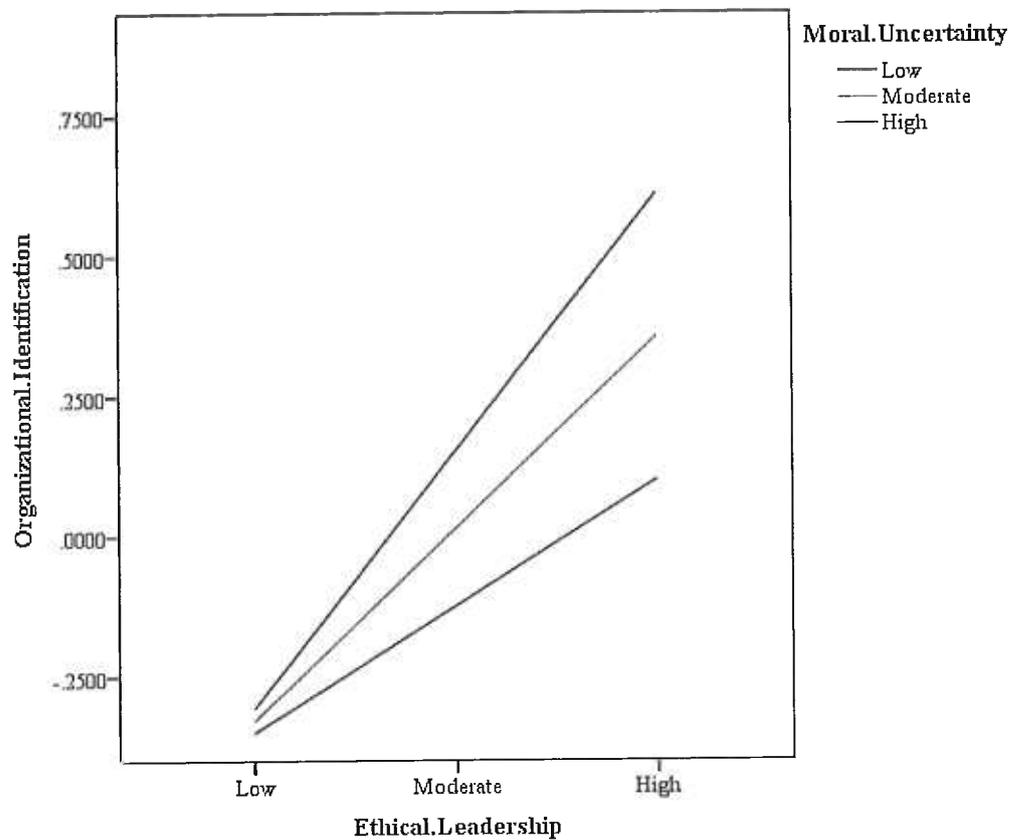


Figure 4. Graph of the relationship between ethical leadership and organizational identification, moderated by moral uncertainty.

## Discussion

The aim of the current research was to extend previous research on the effects of ethical leadership and offer new insights into the processes by which ethical leadership influences employees. Hence, the present study specifically examined how ethical leadership influences employee well-being directly, and through organizational identification. Furthermore, this paper is the first to consider not only the moral aspects of ethical leadership itself, but also characteristics pertaining to the employees, such as their level of moral uncertainty. A new scale was thus constructed to also investigate the role of moral uncertainty.

The results of the study provide additional empirical support to Kalshoven and Boon (2012) and Bedi et al. (2015) by replicating the hypothesized positive effect of ethical leadership on employee well-being. Moreover, as proposed, organizational identification did indeed mediate the relationship between ethical leadership and employee well-being, supporting the theoretical ideas proposed by Walumbwa et al. (2011). Essentially, no moderating effect was found for different levels of moral uncertainty. Nevertheless, the results still offer valuable insights that encourage the continued broadening of the field of ethical leadership by developing and investigating new concepts related to business, ethics, and morality. The replication of the positive relationship between ethical leadership and employee well-being demonstrates the importance of ethical leadership research (Bedi et al., 2015; Brown et al., 2005), as well as the need for continued efforts of ethical leadership in the business world.

As hypothesized, organizational identification mediated the relationship between ethical leadership and employee well-being. Organizational identification was predicted to mediate the relationship between ethical leadership and employee well-being based on the premise laid out by the social identity theory (Tajfel, 1959, 1969) that organizational identification is motivated by the self-enhancement and uncertainty-reduction objectives. For example, as reduced uncertainty is related to increased well-being (Fredrickson, 2002; Ritchie et al., 2011), it seemed appropriate to assume that organizational identification is one way that ethical leadership leads to high levels of employee well-being; a hypothesis that was supported by the present research.

Nonetheless, it must be mentioned that the mediation analysis showed that the difference between the total effect and direct effect of ethical leadership on employee well-being was relatively small. This suggests that the relationship between ethical leadership and employee well-being is only partially mediated by organizational identification. Two propositions can be

made based on this finding. First, it is likely that the relationship between ethical leadership and employee well-being is mediated by multiple different concepts. One such concept may be the meaning of work. Meaningful work is generally described as the presence of a purpose that exceeds the extrinsic outcomes of the work itself (Arnold, Turner, Barling, Kelloway, & McKee, 2007). Indeed, meaning of work has been found to mediate the relationship between transformational leadership and employee well-being (Arnold et al., 2007). Considering the similarities between transformational and ethical leadership, it is hence likely that meaning of work also mediates the relationship between ethical leadership and employee well-being.

Second, the partial mediation may also result from the difficulty of distinguishing between organizational identification, team identification, and leader identification in a research design based on a self-administered questionnaire. Although organizational identification, team identification and leader identification are distinguished in the literature, it is possible that respondents may have mixed up these concepts in their mind when responding to the questionnaire. Indeed, previous research has found transformational leadership to relate most strongly to leader identification (Horstmeier, Boer, Homan, & Voelpel, 2017). If this is also the case for ethical leadership, then it can be proposed that leader identification also mediates the relationship between ethical leadership and employee well-being, explaining why only partial mediation was found for organizational identification. Overall, instead of claiming that specifically organizational identification mediated the relationship between ethical leadership and employee well-being, the present study may therefore instead conclude that the relationship was mediated by the general concept of identification.

This conclusion is of high relevance because so far only few studies have examined the link between identification and employee well-being. Instead research has mainly investigated and found organizational identification to result in outcomes primarily beneficial to the company such as increased organizational citizenship behavior (Bedi et al., 2015; Brown & Treviño, 2006), increased effort (van Gils et al., 2015), and increased leadership effectiveness (De Cremer & Van Knippenberg, 2002; van Knippenberg & Hogg, 2003). Similarly, organizational identification has previously only been indirectly linked to levels of well-being by increasing intrinsic motivation (van Knippenberg & Hogg, 2003), self-esteem (Hogg, 2007), and decreasing uncertainty (Hogg, 2007), all of which arguably lead to increased well-being (Ritchie et al., 2011; Wegge et al., 2006). Thus, by having identified identification to be a mediating factor

between ethical leadership and employee well-being, the present study adds to the research field of ethical leadership.

Another way in which the results add to ethical leadership research is by investigating the construct of moral uncertainty. The present research was the first to explore the concept of individuals' level of uncertainty about their moral values and how it influences the way individuals respond to ethical leadership. The results from the study support the creation and need for a construct that captures individuals' moral uncertainty as the low correlation between moral uncertainty and moral identity shows that moral uncertainty is a different concept.

Yet, contrary to the predictions no moderation was found for employee moral uncertainty for the relationship between ethical leadership and employee well-being. Although it is possible that moral uncertainty indeed does not influence the relationship between ethical leadership and employee well-being, the data collected suggests alternative explanations. One explanation for the lack of moderation is the low mean calculated for the moral uncertainty construct ( $M = 1.7982/5$ ,  $SD = 0.5281$ ). Together with the strong positive skew ( $z = 3.29$ ) of the moral uncertainty scale, the low mean indicates the presence of a floor effect. One possible reason for the floor effect may be the influence of social desirability response bias. This occurs when individuals are swayed to under-report occurrences that are perceived to be socially and/or culturally undesirable (Bernardi, 2006; Zerbe & Paulhus, 1987). As ethics and morality are important cornerstones of all social and cultural interactions and environments, it is likely that individuals underreported their level of uncertainty concerning their moral values in the present study. Essentially, the low values of moral uncertainty implies that although calculations were made to identify how differently low, moderate, and high levels of moral uncertainty moderate the relationship between ethical leadership, organizational identification, and employee well-being, the informative value of the present dataset only encompasses low to moderate levels of moral uncertainty. Therefore, based on the present findings no conclusions can be made concerning if and how different levels of moral uncertainty moderate the relationship between ethical leadership, organizational identification, and employee well-being. All that can be concluded is that the relationships between ethical leadership, organizational identification, and employee well-being were positive for all individuals reporting low to moderate levels of moral uncertainty. Although the findings of the present study thus indicated a lack of moderation, future research may be able to capture high levels of moral uncertainty. A sample that contains

levels of moral uncertainty that are less skewed may possibly show that high levels of moral uncertainty moderate the relationship between ethical leadership and employee well-being.

Another possible explanation for the lack of a moderation effect of moral uncertainty is the proposition that the influence of moral uncertainty may be outweighed by a lack of value fit. Indeed, the value fit between employees and employers is important to consider. Cable and Judge (1996) have, for example, found that value fit is positively related to organizational commitment, job satisfaction, and the employees intent to stay, all of which can also be linked to the concepts of organizational identification and employee well-being. The ethical values of leaders and followers may be mismatched because they are on different levels of moral development Kohlberg (1981), or because they adhere to different ethical ideologies. For example, whereas the leader may hold an exceptionist ethical perspective, which acknowledges that exceptions are sometimes necessary (Forsyth, 1980), the follower may hold the absolutism ethical perspective and thus believe all moral judgments should be based on an universal moral principle (Forsyth, 1980). In this case, although both parties could generally be considered ethical, the discrepancy in the moral judgement processes may outweigh all beneficial effects an ethical leader may have on his/her followers, regardless of the employees' level of moral uncertainty.

Finally, there is a noteworthy finding for the moderation effects of moral uncertainty for the relationship between ethical leadership and organizational identification. A significant moderation effect was identified for low and moderate levels of moral uncertainty, but a non-significant effect was identified for high levels of moral uncertainty. Again, due to the floor effect, these high levels of moral uncertainty are essentially moderate levels of moral uncertainty if viewed relative to the five point Likert-scale the construct is measured on. Nevertheless, there is an obvious difference between the lower and higher values of moral uncertainty, which may be explained by the uncertainty-identity theory (Hogg, 2007).

Previous research found that individuals identify with groups to reduce self-relevant uncertainty (Hogg & Terry, 2000; Turner, 1982). Based on this premise the present research hypothesized to find a significant effect for the relationship between ethical leadership and organizational identification for all individuals with moderate to high levels of moral uncertainty. However, the results of this study do not support the argument above. One possible explanation is the discrepancy in the leader's and the follower's level of moral uncertainty. Per definition

ethical leaders are perceived as having low levels of moral uncertainty as they demonstrate 'normatively appropriate conduct' (Brown et al., 2005, p. 120). As the leader symbolizes the prototypes of the group (Hogg & Terry, 2000; van Knippenberg & Hogg, 2003) it is therefore likely that all members of organizations with ethical leaders are perceived to have low levels of moral uncertainty. Consequently, individuals experiencing moderate to high levels of moral uncertainty may perceive there to be a discrepancy between their own level of moral uncertainty and the moral uncertainty level of the leader and the organization. In this case, ethical leadership may thus only serve to confront highly uncertain individuals with their uncertainty. As disagreement with members of a group only increases uncertainty (Abrams, Wetherell, Cochrane, Hogg, & Turner, 1990), such individuals may therefore be less likely to identify with the organization. Therefore, although generally individuals may identify with groups to decrease general uncertainty, this may not be the case for moral uncertainty due to an innate discrepancy between followers with high moral uncertainty and ethical leaders.

### **Practical Implications**

The present research emphasizes the importance of creating and fostering ethical leadership in the business environment. Management should be made aware of the positive influence they can have on employees by role modelling ethical behavior in their public and private life, as well as through continuous social exchange with employees. The present study has shown that ethical leadership leads to increased employee well-being, as well as increased identification. Considering this in light of the continuously growing economy, business ethics has thus gained in importance. Ethical behavior should therefore no longer be viewed as a differentiating feature among leaders, but a core component of leadership. The present study serves to support this view as it demonstrates that ethical leadership benefits employees, businesses, and even society.

Lack of managerial support and role uncertainty were identified as two of the main causes of work-related stress (HSE, 2016). Leadership has thus been directly related to negative outcomes that affect the employees' health, company performance, and costs to society (EU-OSHA, 2014; Stansfeld & Candy, 2006). As managerial support and role clarification are two major features of ethical leadership, it shows that ethical leaders can positively influence employee well-being by aiding the reduction of work-related stress. The findings of the present study support this argument as ethical leadership was significantly positively related to employee well-being and organizational identification, which has also been positively related to employee

well-being. Furthermore, the present study also demonstrated that employee well-being was negatively correlated with employee stress.

The benefits of reduced levels of job-strain can also be quantified. First, high employee well-being has been associated with high-quality job performance (Wright & Cropanzano, 2000), which is likely to result in increased output. Second, high levels of well-being have also been associated with longer retention of employees (well-being-retention link; Page & Vella-Brodrick, 2008). As losing an employee has been estimated to cost organizations between 1.5 to 2.5 times of the employee's annual salary (Cascio, 2003), management should be particularly interested in retaining employees as long as possible. Additionally, job strain has also shown to cost society. Bodeker and Friedrichs (2011), for example, estimated job strain to cost the German society €29.2 billion annually. Overall, it can therefore be concluded that organizations should increase their efforts to establish ethical leadership to increase identification and employee well-being, thus creating psychological and monetary benefits for the employees, organization, and society.

### **Strengths, Limitations & Suggestions for Future Research**

Collecting data in form of an online questionnaire allowed the researcher to reach a large number of people. The data collection process was hence not limited to a particular time or place, so that some common sources of sampling bias could be reduced. This is reflected by the variety in the size of the companies that respondents work for (10.1% small business, 26.6% mid-sized business, 15.6% large national business, 47.7% multinational corporation), as well as the variety in the nationality of respondents (10 nationalities; 65.1% German, 11.9% British, and 10.1% North American).

Another strength of the study was the inclusion of control variables such as the moral identity scale and the item measuring respondents' level of job insecurity. By including these control items in all analyses the findings could be validated. As none of the findings significantly changed when control variables were included in the calculations, the influence of the control variables could already be excluded as alternative explanations, which strengthened the conclusions drawn.

A first limitation lies in the format of the present research. Although data collection was originally planned in form of a longitudinal design, low response rates for the follow-up questionnaire forced the researcher to investigate the hypotheses in form of a cross-sectional design instead (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Thus, due to the cross-sectional

nature of the study, causality of the relations investigated cannot be concluded. A suggestion for future research is thus to repeat the study in form of a longitudinal study, so that causal conclusions can be made.

A second limitation concerns the investigation of organizational identification as a mediator of the relationship between ethical leadership and employee well-being. Although analysis indicated a positive mediation of organizational identification, this finding could be strengthened by including a control item. Including a control item for organizational identification would make sure that participants are in fact responding to questions about their organizational identification rather than, for example, identification with their leader. The control item could be in the form of a question asking respondents what (and who) they thought of when responding to the organizational identification scale. Alternatively, the questionnaire could also include scales measuring team and/or leader identification. This recommendation aligns with suggestions made by Horstmeier et al. (2017) to consider multiple foci of identification simultaneously.

A third limitation is that, although previous research has found individuals to differ in their level of uncertainty (Hogg, 2007) and clarity (Campbell et al., 1996), the present study identified a floor effect for the moral uncertainty scale ( $M = 1.80$ ,  $SD = 0.53$ ). As almost all respondents indicated low (to moderate) levels of moral uncertainty, the present research was unable to draw any conclusions concerning the moderating effect of high levels of moral uncertainty. Future research that also measures high levels of moral uncertainty would thus extend the present research. One way to do so would be to utilize a significantly larger sample, increasing the probability of also measuring high levels of moral uncertainty. Another way would be to follow an experimental design and manipulate the respondents level of moral uncertainty, which would ensure that all levels of moral uncertainty are tested. Yet, it must be acknowledged that this would also transform moral uncertainty from a continuous into a categorical construct (low, moderate, and high) and thus possibly decrease the explanatory power of the findings due to the use of arbitrary cut-off points.

Overall, another way that future research could extend the present research is by controlling for cultural differences for all variables included in the research model. Indeed, cultural boundaries seem to apply especially to the constructs of ethical leadership and moral uncertainty as both of these are based on Western virtues and the Western construal of the self

(Campbell et al., 1996). Findings of the present study can therefore only be applied to Western cultures. One potential way to account for cultural differences in future research would be to adapt results based on Hofstede's cultural dimensions (Hofstede, 2001; Hofstede, Hofstede, & Minkov, 2010). Alternatively, additional items could be added to the scales to accommodate cultural differences.

Finally, the present research could be extended by including measures of the ethical value fit between the leader and the follower (Cable & Judge, 1996; Coldwell, Billsberry, van Meurs, & Marsh, 2008). As value fit seems to play an important role in the perception and implementation of ethical behavior, analysing the significance of this fit would offer additional insights in the processes that underlie the relationship between ethical leadership, organizational identification, and employee well-being.

## Conclusion

Although research in ethical leadership has increased steadily over the course of the last couple of years, the present study is the first to extend the field by examining the relationship between ethical leadership and employee well-being, including a new mediating and moderating factor. For one, a new measure was constructed to grasp the concept of moral uncertainty experienced by individuals and investigate the effect that different levels of moral uncertainty have on the relationship between ethical leadership, organizational identification, and employee well-being. Furthermore, this study is one of the first to consider and discover the mediating effect of organizational identification on the relationship between ethical leadership and employee well-being. In conclusion, the present study identified that ethical leadership lead to increased organizational identification and increased employee well-being. Additionally, it also identified organizational identification as a mediator of the relationship between ethical leadership and employee well-being. Considering these positive effects, this research thus argues for continued efforts to establish ethical leadership as common practice despite the challenges resulting from the fast-changing economy.

## References

- Abrams, D., Wetherell, M., Cochrane, S., Hogg, M. A., & Turner, J. C. (1990). Knowing what to think by knowing who you are: Self-categorization and the nature of norm formation, conformity and group polarization. *British Journal of Social Psychology*, 29(2), 97-119. doi:10.1111/j.2044-8309.1990.tb00892.x
- Aiken, L. S., West, S. G., & Reno, R. R. (1991). *Multiple regression: Testing and interpreting interactions*: Sage.
- Aquino, K., & Reed, A. I. (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology*, 83(6), 1423-1440. doi:10.1037//0022-3514.83.6.142
- Arnold, K. A., Turner, N., Barling, J., Kelloway, E. K., & McKee, M. C. (2007). Transformational leadership and psychological well-being: The mediating role of meaningful work. *Journal of Occupational and Health Psychology*, 12(3), 193-203. doi:10.1037/1076-8998.12.3.193
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bedi, A., Alpaslan, C. M., & Green, S. (2015). A meta-analytic review of ethical leadership outcomes and moderators. *Journal of Business Ethics*, 139(3), 517-536. doi:10.1007/s10551-015-2625-1
- Bernardi, R. A. (2006). Associations between Hofstede's cultural constructs and social desirability response bias. *Journal of Business Ethics*, 65(1), 43-53. doi:10.1007/s10551-005-5353-0
- Bodeker, W., & Friedrichs, M. (2011). *Kosten der psychischen Erkrankungen und Belastungen in Deutschland*. Retrieved from Duesseldorf: [http://www.boeckler.de/pdf/p\\_mbf\\_regellungsluecke.pdf](http://www.boeckler.de/pdf/p_mbf_regellungsluecke.pdf)
- Brown, M. E., & Treviño, L. K. (2006). Ethical leadership: A review and future directions. *The Leadership Quarterly*, 17(6), 595-616. doi:10.1016/j.leaqua.2006.10.004
- Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, 97(2), 117-134. doi:10.1016/j.obhdp.2005.03.002
- Cable, D. M., & Judge, T. A. (1996). Person-Organization fit, job choice decisions, and organizational entry. *Organizational Behavior and Human Decision Processes*, 67(3), 294-311. doi:10.1006/obhd.1996.0081

- Campbell, J. D., Trapnell, P. D., Heine, S. J., Katz, I. M., Lavalley, L. F., & Lehman, D. R. (1996). Self-concept clarity: Measurement, personality correlates, and cultural boundaries. *Journal of Personality and Social Psychology*, 70(1), 141-156. doi:10.1037/0022-3514.70.1.141
- Cascio, W. F. (2003). *Managing human resources: Productivity, quality of work life, profits*. New York, NY: McGraw-Hill.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). New York: NY: Psychology Press.
- Cohen, S., & Williamson, G. (1988). Perceived stress in a probability sample of the US. In S. Spacapan & S. Oskamp (Eds.), *The social psychology of health: Claremont symposium on applied social psychology* (pp. 31-67). Newbury Park, CA: Sage.
- Coldwell, D. A., Billsberry, J., van Meurs, N., & Marsh, P. J. G. (2008). The effects of person-organization ethical fit on employee attraction and retention: Towards a testable explanatory model. *Journal of Business Ethics*, 78(4), 611-622. doi:10.1007/s10551-007-9371-y
- Commission, E. (2002). *Guidance on work-related stress: Spice of life or kiss of death?* Retrieved from Luxembourg, European Communities, 2002: <https://osha.europa.eu/en/legislation/guidelines/guidance-on-work-related-stress>
- Cotton, P., & Hart, P. M. (2003). Occupational wellbeing and performance: A review of organisational health research. *Australian Psychologist*, 38(2), 118-127. doi:10.1080/00050060310001707117
- Danna, K., & Griffin, R. W. (1999). Health and well-being in the workplace: A review and synthesis of the literature. *Journal of Management*, 25(3), 357-384. doi:10.1177/014920639902500305
- De Cremer, D., & Van Knippenberg, D. (2002). How do leaders promote cooperation? The effects of charisma and procedural fairness. *Journal of Applied Psychology*, 87(5), 858-866. doi:10.1037/0021-9010.87.5.858
- De Witte, H. (1999). Job insecurity and psychological well-being: Review of the literature and exploration of some unresolved issues. *European Journal of Work and Organizational Psychology*, 8(2), 155-177. doi:10.1080/135943299398302

- Den Hartog, D. N., & Belschak, F. D. (2012). Work engagement and machiavellianism in the ethical leadership process. *Journal of Business Ethics, 107*(1), 35-47.  
doi:10.1007/s10551-012-1296-4
- Emerson, R. M. (1976). Social exchange theory. *Annual Review of Sociology, 2*(1), 335-362.  
doi:10.1146/annurev.so.02.080176.002003
- EU-OSHA. (2014). *Calculating the cost of work-related stress and psychosocial risks*. Retrieved from Luxembourg; Publications Office of the European Union:  
[https://osha.europa.eu/en/publications/literature\\_reviews/calculating-the-cost-of-work-related-stress-and-psychosocial-risks/view](https://osha.europa.eu/en/publications/literature_reviews/calculating-the-cost-of-work-related-stress-and-psychosocial-risks/view)
- Field, A. (2013). *Discovering statistics using IBM SPSS Statistics* (4th ed.). London: Sage
- Forsyth, D. R. (1980). A taxonomy of ethical ideologies. *Journal of Personality and Social Psychology, 39*(1), 175-184. doi:10.1037/0022-3514.39.1.175
- Fredrickson, B. L. (2002). Positive emotions *Handbook of positive psychology* (pp. 120-134).
- Gollwitzer, P. M., & Bargh, J. A. (1996). *The psychology of action: Linking cognition and motivation to behavior*. New York, NY: Guilford Press.
- Grant, F., & Hogg, M. A. (2012). Self-uncertainty, social identity prominence and group identification. *Journal of Experimental Social Psychology, 48*(2), 538-542.  
doi:10.1016/j.jesp.2011.11.006
- Grebner, S., Semmer, N. K., & Elfrering, A. (2005). Working conditions and three types of well-being: A longitudinal study with self-report and rating data. *Journal of Occupational Health Psychology, 10*(1), 31-43. doi:10.1037/1076-8998.10.1.31
- Harvey, P., Harris, K. J., Kacmar, K. M., Buckless, A., & Pescosolido, A. T. (2014). The impact of political skill on employees' perceptions of ethical leadership. *Journal of Leadership & Organizational Studies, 21*(1), 5-16. doi:10.1177/1548051813483834
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: Guilford Press.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist, 44*(3), 513-524. doi:10.1037/0003-066X.44.3.513
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations* (2nd Ed ed.). Thousand Oaks, CA: Sage.

- Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations: Software of the mind* (3rd ed.). New York: McGraw-Hill USA.
- Hogg, M. A. (2001). A social identity theory of leadership. *Personality and Social Psychology Review*, 5(3), 184-200. doi:10.1207/S15327957PSPR0503\_1
- Hogg, M. A. (2007). Uncertainty–Identity Theory. *Advances in Experimental Social Psychology*, 39, 69-126. doi:10.1016/s0065-2601(06)39002-8
- Hogg, M. A., & Terry, D. J. (2000). Social identity and self-categorization processes in organizational contexts. *The Academy of Management Review*, 25(1), 121-140. doi:10.5465/AMR.2000.2791606
- Hohman, Z. P., & Hogg, M. A. (2015). Fearing the uncertain: Self-uncertainty plays a role in mortality salience. *Journal of Experimental Social Psychology*, 57, 31-42. doi:10.1016/j.jesp.2014.11.007
- Horstmeier, C. A., Boer, D., Homan, A. C., & Voelpel, S. C. (2017). The differential effects of transformational leadership on multiple identifications at work: A meta-analytic model. *British Journal of Management*, 28(2), 280-298. doi:10.1111/1467-8551.12160
- HSE. (2016). *Work related stress, anxiety and depression statistics in Great Britain 2016*. Retrieved from [www.hse.gov.uk/statistics](http://www.hse.gov.uk/statistics)
- Hutcheson, G. D., & Sofroniou, N. (1999). *The multivariate social scientist: Introductory statistics using generalized linear models*. London: Sage.
- Jain, A. K., Giga, S. I., & Cooper, C. L. (2013). Stress, health and well-being: The mediating role of employee and organizational commitment. *International Journal of Environmental Research and Public Health*, 10(10), 4907-4924. doi:10.3390/ijerph10104907
- Kalshoven, K., & Boon, C. T. (2012). Ethical leadership, employee well-being, and helping. *Journal of Personnel Psychology*, 11(1), 60-68. doi:10.1027/1866-5888/a000056
- Kohlberg, L. (1969). Stage and sequence: The cognitive-development approach to socialization. In D. Goslin (Ed.), *Handbook of socialization theory and research* (pp. 347-480). Chicago: Rand-McNally.
- Kohlberg, L. (1981). *The philosophy of moral development: Vol 1. Moral stages and the idea of justice*. San Francisco: Harper & Row Limited.
- MacIntyre, A., Charbonneau, D., & O’Keefe, D. (2013). The role of transformational and ethical leadership in building and maintaining resilience. In R. R. Sinclair & T. W. Britt (Eds.),

- Building psychological resilience in military personnel: Theory and practice.* (Vol. 268, pp. 85-111). Washington, D.C: American Psychological Association.
- Mael, F., & Ashforth, B. E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior*, 13(2), 103-123. doi:10.1002/job.4030130202
- Markus, H. (1977). Self-schemata and processing information about the self. *Journal of Personality and Social Psychology*, 35(2), 63-78. doi:10.1037/0022-3514.35.2.63
- Mukherjee, A. S. (2016, Dec 28). Why we're seeing so many corporate scandals. *Harvard Business Review*. Retrieved from Harvard Business Review website: <https://hbr.org/2016/12/why-were-seeing-so-many-corporate-scandals>
- Page, K. M., & Vella-Brodrick, D. A. (2008). The 'what', 'why' and 'how' of employee well-being: A new model. *Social Indicators Research*, 90(3), 441-458. doi:10.1007/s11205-008-9270-3
- Piccolo, R. F., Greenbaum, R., Den Hartog, D. N., & Folger, R. (2010). The relationship between ethical leadership and core job characteristics. *Journal of Organizational Behavior*, 31(2-3), 259-278. doi:10.1002/job.627
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903. doi:10.1037/0021-9010.88.5.879
- Resick, C. J., Hanges, P. J., Dickson, M. W., & Mitchelson, J. K. (2006). A cross-cultural examination of the endorsement of ethical leadership. *Journal of Business Ethics*, 63(4), 345-359. doi:10.1007/A10551-005-3242-1
- Ritchie, T. D., Sedikides, C., Wildschut, T., Arndt, J., & Gidron, Y. (2011). Self-concept clarity mediates the relation between stress and subjective well-being. *Self and Identity*, 10(4), 493-508. doi:10.1080/15298868.2010.493066
- Rosa, H. (2013). *Acceleration at work*. Paper presented at the 16th Conference of the European Association of Work and Organisational Psychology, Imagine the future world: how do we want to work tomorrow?, 22-25 May, Muenster, Germany.

- Stansfeld, S., & Candy, B. (2006). Psychosocial work environment and mental health: A meta-analytic review. *Scandinavian Journal of Work, Environment & Health*, 32(6), 443-462. doi:10.5271/sjweh.1050
- Tajfel, H. (1959). Quantitative judgement in social perception. *British Journal of Psychology*, 50(1), 16-29. doi:10.1111/j.2044-8295.1959.tb00677.x
- Tajfel, H. (1969). Cognitive aspects of prejudice. *Journal of Social Issues*, 25(4), 79-97. doi:10.1111/j.1540-4560.1969.tb00620.x
- Tajfel, H. (1972). Social categorization: English manuscript of 'La catégorisation sociale'. In S. Moscovici (Ed.), *Introduction à la Psychologie Sociale* (Vol. 1, pp. 272-302). Paris: Larousse.
- Tepper, B. J., Carr, J. C., Breaux, D. M., Geider, S., Hu, C., & Hua, W. (2009). Abusive supervision, intentions to quit, and employees' workplace deviance: A power/dependence analysis. *Organizational Behavior and Human Decision Processes*, 109(2), 156-167. doi:10.1016/j.obhdp.2009.03.004
- Thau, S., Bennett, R. J., Mitchell, M. S., & Marrs, M. B. (2009). How management style moderates the relationship between abusive supervision and workplace deviance: An uncertainty management theory perspective. *Organizational Behavior and Human Decision Processes*, 108(1), 79-92. doi:10.1016/j.obhdp.2008.06.003
- Trevino, L. K. (1986). Ethical decision making in organizations: A person-situation interactionist model. *The Academy of Management Review*, 11(3), 601-617. doi:10.2307/258313
- Turner, J. C. (1982). Towards a cognitive redefinition of the social group. In H. Tajfel (Ed.), *Social identity and intergroup relations* (pp. 15-40). New York, NY: Cambridge University Press.
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford, England: Blackwell.
- van Gils, S., Van Quaquebeke, N., van Knippenberg, D., van Dijke, M., & De Cremer, D. (2015). Ethical leadership and follower organizational deviance: The moderating role of follower moral attentiveness. *The Leadership Quarterly*, 26(2), 190-203. doi:10.1016/j.leaqua.2014.08.005

- van Knippenberg, D., & Hogg, M. A. (2003). A social identity model of leadership effectiveness in organizations. *Research in Organizational Behavior*, 25, 243-295. doi:10.1016/s0191-3085(03)25006-1
- Van Knippenberg, D., Van Knippenberg, B., De Cremer, D., & Hogg, M. A. (2004). Leadership, self, and identity: A review and research agenda. *The Leadership Quarterly*, 15(6), 825-856. doi:10.1016/j.leaqua.2004.09.002
- Walumbwa, F. O., Mayer, D. M., Wang, P., Wang, H., Workman, K., & Christensen, A. L. (2011). Linking ethical leadership to employee performance: The roles of leader-member exchange, self-efficacy, and organizational identification. *Organizational Behavior and Human Decision Processes*, 115(2), 204-213. doi:10.1016/j.obhdp.2010.11.002
- Warr, P. (1987). *Work, unemployment, and mental health*. Oxford, UK: Clarendon Press.
- Warr, P. (1990). The measurement of well-being and other aspects of mental health. *Journal of Occupational Psychology*, 63(3), 193-210. doi:10.1111/j.2044-8325.1990.tb00521.x
- Wegge, J., Van Dick, R., Fisher, G. K., Wecking, C., & Moltzen, K. (2006). Work motivation, organisational identification, and well-being in call centre work. *An International Journal of Work, Health & Organisations*, 20(1), 60-83. doi:10.1080/02678370600655553
- Wright, T. A., & Bonett, D. G. (2007). Job satisfaction and psychological well-being as nonadditive predictors of workplace turnover. *Journal of Management*, 33(2), 141-160. doi:10.1177/0149206306297582
- Wright, T. A., & Cropanzano, R. (1997). *Well-being, satisfaction and job performance: Another look at the happy/productive worker relationship*. Paper presented at the Academy of Management Proceedings.
- Wright, T. A., & Cropanzano, R. (2000). Psychological well-being and job satisfaction as predictors of job performance. *Journal of occupational health psychology*, 5(1), 84-94. doi:10.1037/1076-8998.5.1.84
- Zerbe, W. J., & Paulhus, D. L. (1987). Socially desirable responding in organizational behavior: A reconception. *The Academy of Management Review*, 12(2), 250-264. doi:10.2307/258533

**Appendix 1: Ethical Leadership Scale by Brown et al. (2005)**

1. My leader, conducts his/her personal life in an ethical manner.
2. My leader, defines success not just by results but also the way that they are obtained.
3. My leader, listens to what employees have to say.
4. My leader, disciplines employees who violate ethical standards.
5. My leader, makes fair and balanced decisions.
6. My leader, can be trusted.
7. My leader, discusses business ethics or values with employees.
8. My leader, sets an example of how to do things the right way in terms of ethics.
9. My leader, has the best interests of employees in mind.
10. My leader, when making decisions, asks “what is the right thing to do?”.

*Note.* Items were rated on a seven-point Likert scale from 1 (strongly disagree) to 7 (strongly agree).

**Appendix 2: Organizational Identification Scale by Mael and Ashforth (1992)**

1. When someone criticizes my organization, it feels like a personal insult.
2. I am very interested in what others think about my organization.
3. When I talk about this organization, I usually say 'we' rather than 'they'.
4. This organization's successes are my successes.
5. When someone praises this organization it feels like a personal compliment.
6. If a story in the media criticized this organization, I would feel embarrassed.

*Note.* Items were rated on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree).

**Appendix 3: Self-Concept Clarity Scale by Campbell et al. (1996) Adapted to Measure Moral Uncertainty**

\*1. My beliefs about myself often conflict with one another.

→ *My beliefs about morality (i.e. what is moral and what is not moral) often conflict with one another.*

\*2. On one day I might have one opinion of myself and on another day I might have a different opinion.

→ *On one day I might have one opinion of my moral values and on another day I might have a different opinion.*

3. I spend a lot of time wondering about what kind of person I really am.

→ *I spend a lot of time wondering about what my moral values really are.*

4. Sometimes I feel that I am not really the person that I appear to be.

→ *Not adapted. Instead replaced with a reading check question: "Please click 'agree' here".*

5. When I think about the kind of person I have been in the past, I'm not sure what I was really like.

→ *When I think about my moral values of the past, I am not sure what my moral values were really like.*

6. I seldom experience conflict between the different aspects of my personality.

→ *I seldom experience conflict between the different aspects of my moral opinion.*

\*7. Sometimes I think I know other people better than I know myself.

→ *Sometimes I think I know other people's moral values better than my own.*

8. My beliefs about myself seem to change very frequently.

→ *My beliefs about moral seem to change very frequently.*

\*9. If I were asked to describe my personality, my description might end up being different from one day to another day.

→ *If I were asked to describe my moral values, my description might end up being different from one day to another day.*

10. Even if I wanted to, I don't think I would tell someone what I'm really like.

→ *Even if I wanted to, I don't think I would tell someone what moral viewpoint I really hold.*

\*11. In general, I have a clear sense of who I am and what I am.

→ *In general, I have a clear sense of who I am and what my moral values are.*

\*12. It is often hard for me to make up my mind about things because I don't really know what I want.

→ *It is often hard for me to make up my mind about things, because I don't really know what my moral values are.*

*Note.* Items of the original questionnaire are presented first. The transformed items that were used to measure moral uncertainty in the present study are given in italics below. All items that made up the six-item scale after the explanatory factor analysis are marked by an '\*'.

Items were rated on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree).

#### Appendix 4: Moral Identity Questionnaire by Aquino and Reed (2002)

Listed below are some characteristics that may describe a person:

*caring, compassionate, fair, friendly, generous, hardworking, helpful, honest, kind.*

The person with these characteristics could be you or it could be someone else. For a moment, visualize in your mind the kind of person who has these characteristics. Imagine how that person would think, feel, and act. When you have a clear image of what this person would be like, answer the following questions:

1. It would make me feel good to be a person who has these characteristics.
2. Being someone who has these characteristics is an important part of who I am.
3. I would be ashamed to be a person who has these characteristics.
4. Having these characteristics is not really important to me.
5. I strongly desire to have these characteristics.
6. I often buy products that communicate the fact that I have these characteristics.
7. I often wear clothes that identify me as having these characteristics.
8. The types of things I do in my spare time (e.g., hobbies) clearly identify me as having these characteristics.
9. The kinds of books and magazines that I read identify me as having these characteristics.
10. The fact that I have these characteristics is communicated to others by my membership in certain organizations.
11. I am actively involved in activities that communicate to others that I have these characteristics.

*Note.* Items were rated on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree).

## Appendix 5: Well-Being Questionnaire by Warr (1990)

*In the past few weeks, to what extent has your job made you feel...?*

1. Comfortable
2. Calm
3. Relaxed
4. Motivated
5. Enthusiastic
6. Optimistic
7. Tense
8. Anxious
9. Worried
10. Depressed
11. Melancholic
12. Unhappy

*Note.* Items were rated on a six-point scale with the possible responses: never (1), occasionally (2), some of the time (3), much of the time (4), most of the time (5), all of the time (6).

**Appendix 6: Perceived Stress Scale – 4-Item (PSS-4) by Cohen and Williamson (1988)**

The questions in this scale ask you about your feelings and thoughts during the last month.

In each case, please indicate your response by selecting the circle representing how often you felt or thought a certain way.

1. In the last month, how often have you felt that you were unable to control the important things in your life?
2. In the last month, how often have you felt confident about your ability to handle your personal problems?
3. In the last month, how often have you felt that things were going your way?
4. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

*Note.* Items were rated on a five-point scale with the possible responses: never (1), almost never (2), sometimes (3), fairly often (4), very often (5).

**Appendix 7: One-Item Short-Term Job-Insecurity Scale by De Witte (1999)**

1. How large, in your opinion, is the probability that you will become unemployed in the near future?

*Note.* Items were rated on a five-point scale with the possible responses: very large (1), rather large (2), neither large, nor small (3), rather small (4), very small or impossible (5).

