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Congruence of leader self-perceptions and follower perceptions of authentic leadership: Understanding what authentic leadership is and how it enhances employees' job satisfaction

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Congruence of leader self-perceptions and follower perceptions of authentic leadership: Understanding what authentic leadership is and how it enhances employees' job satisfaction

Abstract

We propose and empirically test a multilevel model of cross-level interactions between leader self-perceptions (team level) and follower perceptions of authentic leadership on job satisfaction. Data from 24 supervisors and 171 team members were used. Applying hierarchical linear modeling, we found that follower perceptions of authentic leadership predict employee job satisfaction. We also found support for the interaction effect of leader self-perceptions and follower perceptions of authentic leadership in predicting job satisfaction, integrating the leader- and follower-centric perspectives of authentic leadership. Polynomial regression analysis further supported the fact that the congruence between leader self-perceptions and follower perceptions of authentic leadership is beneficial and that both need to be present at high levels to produce the most beneficial results in terms of followers' job satisfaction.

Keywords

Authentic leadership, leader self-perceptions, follower perceptions, job satisfaction, hierarchical linear modeling, polynomial regression analysis

1. Introduction

How employees perceive their leaders and the degree to which this perception corresponds with leaders' self-perceptions is an important issue both for the researchers and the practitioners. Multi-rater instruments continue to be widely used for measuring leadership, which is why it is important to correctly understand the characteristics of different measurement perspectives in terms of a construct's predictors and outcomes (Fleenor, Smither, Atwater, Braddy, & Sturm, 2010). Although different measurement perspectives are commonly discussed in leadership research in general, there has been very little research regarding this issue on the field of authentic leadership. This is surprising as well as deficient, because theoretical foundations of authentic leadership highlight a dilemma whether authentic leaders are genuinely authentic if they perceive themselves to be such, or if they are perceived as such by others (e.g. Cooper, Scandura, & Schriesheim, 2005; Harvey, Martinko, & Gardner, 2006; Toor & Ofori, 2008). Even if the answer to this question may be rather difficult to find, researchers should be conscious of different perceptions concerning a person's authenticity and also be aware of potential drawbacks of assessing authentic leadership from only one perspective.

Authenticity in leadership is a construct that has gained a lot of attention in recent academic research (e.g. George, 2007; Walumbwa, Wang, Wang, Schaubroeck, & Avolio, 2010). It describes leaders with great capacity to effectively process information about themselves (their values, beliefs, goals, and feelings), an ability to adjust their

leadership behavior in accordance with their own self, a clear personal identity, and an ability to harmonize their preferences with demands of society (Chan, Hannah & Gardner, 2005). Even if contributions in this field of study have been abundant in recent years, measuring authentic leadership—the techniques and sources for gathering data—remains one of the fields of debate. Our study deals with the question of what authentic leadership is and how to assess it, be it by examining leaders' personality (individual authenticity), authentic behavior, or by relying predominantly on social construction by others (others' perceptions of authentic leadership). This dilemma is related to the leader-centric vs. follower-centric perspective on leadership (see Meindl, 1995). Unfortunately, prior studies have only applied one of these approaches at a time and therefore include a number of biases influencing either leaders' or followers' perceptions, threatening their conclusions.

To partial out the biases related to only one measurement perspective, we address the issue of measuring authentic leadership from multiple sources and investigate it both from the perspective of team supervisors (leader self-perceptions of authentic leadership) and from the perspective of their followers— team members (follower perceptions of authentic leadership). We make this distinction a critical subject of our study and examine different effects of leader self-perceptions and follower perceptions of authentic leadership on employees' job satisfaction. Even more importantly, since authentic leadership is a multilevel dyadic phenomenon (see Krasikova & LeBreton,

2012), we examine how the two might interact and look into how different levels of agreement between leader and follower perceptions influence this outcome. Doing so, we provide a more objective examination of the relationship between authentic leadership and job satisfaction. Our study aims to contribute to the extant literature by paving the way towards a better understanding of several measurement and prediction issues associated with research on this leadership style. We focus on job satisfaction because it was one of the first outcomes to be associated and empirically linked (using follower-rated data) with authentic leadership (Jensen & Luthans, 2006; Giallonardo, Wong & Iwasiw, 2010; Wong & Laschinger, 2013), while meta-analytic evidence suggests that it influences other beneficial outcomes such as productivity (Harter, Hayes & Schmidt, 2002) and job performance (Judge et al., 2001).

We take a multilevel approach and thereby address a future research suggestion made by Walumbwa, Gardner, Avolio, Wernsing, and Peterson (2008). Our research design resembles the one of Walumbwa et al. (2010), who conducted a multilevel study by gathering data from both supervisors and their direct reports. However, they did not gather data by applying two measurement perspectives for assessing the same construct. Our study examines differential predictive value and congruence of the two measurement perspectives of authentic leadership. Such simultaneous assessment of the same subject (i.e. authentic leadership) is used for the first time in authentic leadership research, although it has been previously suggested (e.g. Cooper et al., 2005). We

attempt to add to our understanding of what authentic leadership is, how it is manifested, and how it influences follower outcomes by comparing and contrasting leader self-perceptions and follower perceptions of authentic leadership. This approach is theoretically important as it depicts potentially different results and interactive value that might derive from examining authentic leadership based on data gathered from two different sources. It also provides further and more precise evidence on how authentic leadership may result in a beneficial individual outcome – employee job satisfaction.

2. Theoretical background and hypotheses development

2.1. Authentic leadership: dimensions and perceptions

Authentic leadership is conceptualized as the root concept and a theoretical foundation for any positive forms of leadership (Ilies et al., 2005; May et al., 2003). Authentic people are focal to authentic leadership that can be authentic transformational, authentic transactional, or of any third type (Shamir & Eilam, 2005). It represents the extent to which the managers are aware of and also exhibit a pattern of openness and clarity in their behavior vis-à-vis others. They do so by sharing information, accepting others' inputs, and revealing their own values, motives, emotions, and goals in a way that enables the followers to assess the leaders' behavior (Walumbwa et al., 2010). A large number of empirical studies (in addition to theoretical conceptualizations) have emerged in recent years. These studies are focused on examining the relationships between

authentic leadership and numerous employee attitudes and behaviors (e.g. Walumbwa et al., 2008; Walumbwa et al., 2010).

An important characteristic of authentic leadership refers to the extent as to which the managers understand their own strengths, weaknesses, values, and motives. Even though the construct of authenticity lies in the core of authentic leadership research, and individual authenticity does represent a necessary condition for authentic leadership behavior (authentic leaders have to be individually authentic; Gardner et al., 2005), it is not also a sufficient one. Authentic leadership also involves leaders' choice or motivation to exhibit all behavioral aspects of this construct (see Caza & Jackson, 2011), as well as recognizes how others view their leadership as demonstrated, for example, via leaders' behavior or facial expressions (see Ashkanasy, 2002). Thus, both internal and external referents should be included when discussing authentic leadership. Internal referents address the managers' self-knowledge; their mental states including their beliefs, desires, and feelings. On the other hand, external referents tackle the managers' "reflected self-image" that deals with how others perceive an individual in question. Authentic leadership prescribes the managers to use both self-knowledge and reflected self-image to enhance their effectiveness as leaders (Walumbwa et al., 2010).

Many researchers assume that authenticity and consequently authentic leadership do not involve others' perception of a manager, but only an individual's own actions in accordance with an individual's true nature (Shamir & Eilam, 2005; George, Sims,

McLean, & Mayer, 2007; George, 2007). Individuals have access to in-depth information about themselves that no one else has. With regard to the introspected nature of authentic leadership elements (Avolio & Gardner, 2005), in particular the self-awareness dimension, it makes sense to evaluate authentic leadership through self-reported ratings, as well. Such an approach allows for a deeper understanding of an individual's internal personal traits. This assessment is more concerned with the leader's personality and in line with the leader-centric perspective on leadership.

Sparrowe (2005) opposes the self-ascribed view and highlights the need to assess a manager's authenticity from multiple sources. In line with the follower-centric perspective on leadership, Goffee and Jones (2005), and Harvey et al. (2006) insist that authenticity must be attributed to an individual by others. In this view, the managers cannot assess themselves as authentic, but can only be described as such by people around them. This may be due to the relational orientation of the construct (Ilies et al., 2005). Defined as such, authenticity is only perceived by others, which assesses the expression of leaders' characters – their behavior. Therefore, two perspectives regarding the perception of authentic leadership can be acknowledged in the literature.

Since the leader—follower relationship is one of the main elements of authentic leadership (Gardner et al., 2005), which is thus a multilevel dyadic construct (Krasikova & LeBreton, 2012), it is essential to collect information about a manager's authenticity both from the leaders as well as from their followers. It is crucial to distinguish between

self-perception of the managers' characteristics and the perceptions of the leaders' characteristics by their followers (Cooper et al., 2005). In line with the model of authentic leadership, which has been validated by Walumbwa et al. (2008) and more recently supported by Neider and Schriesheim (2011), these characteristics can be grouped in four authentic leadership dimensions; self-awareness, internalized moral perspective, balanced processing, and relational transparency.

Self-awareness is related to self-reflection and learning about oneself. Through introspection, authentic leaders observe and analyze their own mental state; their thoughts, feelings, and aspirations. Internal connection with one's true self is achieved by an individual delving into his/her own personality by recalling the important events in his/her life, and by examining his/her reactions and emotions during these milestones (Avolio & Gardner, 2005). Goffee and Jones (2006) claim leaders' self-awareness is less important than perceptions of their followers. It is also much more difficult, if not impossible, to assess via other-ratings; others can only assume or indirectly make conclusions about one's self-awareness based on other authentic leadership dimensions that are more relationally-based and visible to others through behavior.

Internalized moral perspective implies that the managers possess and exhibit internal moral standards and values instead of allowing external pressure influence their behavior. Individuals possessing high levels of moral perspective direct their own behavior to match with moral standards (May et al., 2003; Begley, 2006; Novicevic et

al., 2006). Leadership is moral only if an individual's internalized values are moral (George, 2007), or, if they are perceived as such by others (Sparrowe, 2005).

The third authentic leadership dimension, balanced processing, represents objectively analyzing all relevant information as bias-free as possible before making a decision (Gardner et al., 2005). Even though all humans are inherently biased and frequently process information inaccurately, particularly regarding self-relevant information (Tice & Wallace, 2003), high levels of balanced processing that are characteristic for authentic leadership help overcome these individual biases. Balanced processing includes precise and balanced perception and evaluation of oneself and others that is independent from ego-based defense mechanisms (Gardner, Fischer & Hunt, 2009).

The fourth and final authentic leadership dimension, relational transparency, involves leaders' exhibiting open, transparent relations with their coworkers. It includes representation of an individual's true interior. Managers show their true selves when they demonstrate openness, self-disclosure and, within tight relationships with followers, trust (Gardner et al., 2005). Such behavior encourages trust within the leader—follower relationship, in which information is shared and true thoughts and feelings are expressed (Kernis, 2003). Via relational transparency, other dimensions of authentic leadership become apparent to others. As discussed by Caza and Jackson (2011), authentic leadership research highlighted the notion that all four dimensions need to be present in both leaders' thoughts and actions if they should be labeled as

authentic leaders (Gardner et al., 2005). Individuals that are authentically self-aware, for example, but choose to behave in an inauthentic fashion, should thus not be considered as authentic leaders (Harter, 2002; Kernis, 2003).

2.2. The relationship between leader self-perceptions and follower perceptions of authentic leadership, and employees' job satisfaction

The ratings used for assessing leadership are usually obtained by applying multi-source measurement instruments, which gather data regarding managers' traits from various sources (see Bracken, Timmreck, & Church, 2001; Fleenor, Taylor, & Chappelow, 2008). Multi-source ratings help to eliminate the possibility that differences among rating sources are present due to measurement error. Therefore, a lack of agreement between different perspectives is interesting in itself (Fleenor et al., 2010), both methodologically (to ensure more accurate assessments) and content-wise (to contribute to tapping into the true nature of the construct). Equally appealing is to examine unique predictive roles of particular measurement perspectives, as well as their interaction and congruence in predicting beneficial outcomes. However, the up-to-date empirical studies on the field of authentic leadership have not yet focused on different perceptions regarding the leaders' authenticity and how different measurement approaches might uniquely predict and/or interact in predicting employee outcomes.

We first focus on how follower perceptions of authentic leadership may relate to employees' job satisfaction. Doing so, we replicate previous research (e.g. Giallonardo et al., 2010; Jensen & Luthans, 2006; Walumbwa et al., 2008) and provide initial basis for our second hypothesis related to the interaction and congruence between the two measurement perspectives. Authentic leaders with their balanced information processing, relational transparency, and consistency between values, words, and behavior contribute to followers' experiencing higher levels of support for their unique intentions (Ilies et al., 2005). Authentic leaders raise authentic harmonic personalities in the followers, allowing the followers to satisfy their own needs, and develop and reach their own distinctive goals (Gardner et al., 2005). This creates an environment where individuals felt accepted, sustained, and are able to participate without much negative consequences in case they fail. Because of that, they are more satisfied with their work (Waumbwa et al., 2008) as they genuinely feel supported in pursuing their own purpose.

An integral component of authentic leadership is the process of personal identification of employees with the manager. During this process, authentic managers build and develop positive psychological capital within the followers: increase followers' self-confidence, create hope, establish trust (Ilies et al., 2005), enhance resiliency, and raise the level of optimism (Avolio et al., 2004; Gardner & Schermerhorn, 2004; Avolio & Gardner, 2005; Woolley, Caza & Levy, 2011). This is how authentic leaders foster positive appraisal of circumstances based on motivated

effort and perseverance. By feeling genuinely supported for their efforts, employees' job satisfaction increases (Judge, Heller, & Mount, 2002; Luthans et al., 2007).

As the followers internalize values and beliefs that revealed to them by a leader they perceive as authentic, the followers, in accordance with the authentic leadership development process, change the perception of themselves in an actual state and in what they may become (Avolio & Gardner, 2005). Employees that work for a leader they perceive as authentic take the initiative for their own development, as they realize that they can achieve more than they previously thought. The influence of authentic leadership is thereby not about transformation of the followers to the of supervisor's desires. Instead, it represents a more engaged positive self-development of the followers because of the manager's example and authentic support for each follower's efforts. Thus, the followers act in the direction of positive thinking; building self-confidence and creating hope on their own, reflecting in their job satisfaction. We hypothesize:

Hypothesis 1. Follower-perceived authentic leadership is positively related to employees' job satisfaction.

Authentic leadership can also be measured through leader self-perceptions. If we are aware of the possible differences in measurement perceptions regarding a leader's authenticity and their additive and interactional value, this would enable a better

interpretation of research results and provide insights into what authentic leadership is and how it stimulates beneficial employee outcomes.

Knowing and being true to oneself (individual authenticity) is most likely a necessary condition for engaging in the four-dimensional behaviors that make up authentic leadership, but individual authenticity does not automatically mean that one will engage in those behaviors (see Caza & Jackson, 2011), nor that others would perceive them as authentic. The differences in perceptions are partially based on attributional cognitive bias errors and reflect others' cognitive structures (Hunt, 1996), but also reveal actual and genuine differences in terms of a leader's authenticity.

Avolio et al. (2004) argued that authentic leaders lead by example and act as role models, displaying high moral standards, honesty, and integrity, causing the followers to personally identify with them. As followers' role models, supervisors exhibiting high levels of authentic leadership most likely view themselves as honest people of high integrity. Through the process of social identification, employees identify themselves with their group and their leader, and see their group membership as an important part of their identity. The followers' social identification is increased when a deeper sense of moral values is established because of the high-level group membership that is facilitated by authentic role models (Avolio et al., 2004). As this process results from supervisors' role modeling, the employees should perceive higher levels of supervisors' authentic leadership when in fact being exposed to genuine authentic leadership.

Authentic leaders act in accordance with their values and strive to achieve openness and truthfulness in their relationships with followers (Gardner et al., 2005; Kernis, 2003). Such managers lead by example and demonstrate transparent decision-making (Avolio & Gardner, 2005). Yet a leader's internal authenticity cannot be expressed and made clear for his or her followers to see without being openly demonstrated externally. Leader self-perceptions of authenticity, an assessment that is more concerned with the leader's character (personality) and is in line with the leader-centric perspective on leadership, should interact with follower perceptions of authentic leadership in enhancing employees' job satisfaction. Leader self-perceptions of authentic leadership cannot stimulate job satisfaction without also being perceived by the followers. In other words, high levels of leader self-perceptions of authentic leadership will stimulate employees' job satisfaction to the utmost extent when followers also perceive their leaders to be highly authentic. An actual authentic basis of their leaders (individual authenticity) would enable the followers to recognize their leaders' authentic characteristics beneficial for fostering job satisfaction, such as the previously described genuine support for their own development, individual treatment, and positive appraisal.

We argue that higher levels of congruence between leader self-perceptions and follower perceptions of authentic leadership positively influence employee outcome in the form of job satisfaction. Previous research on the field of leadership in general supports such predictions, as Felfe and Heinitz (2010) demonstrated that consensus

regarding the leadership positively influences commitment, organizational citizenship behavior, and customer satisfaction. This could be the case when both leader and followers perceive the leader to be very authentic; authentic leadership should predict employees' job satisfaction optimally in the case of an interaction between leader self-perceptions and follower perceptions of authentic leadership—when both are high.

Higher levels of agreement would indicate followers and leaders perceive the leader's authenticity similarly and enable the leaders to exert the influence of their authentic leadership on job satisfaction, something that is unlikely when only one measurement perspective indicates high values of authentic leadership. However, the congruence concerning a leader's authentic leadership might be possible in another extreme case, as well; when both leader and followers perceive the leader to be very inauthentic—with a low level of authenticity. In this instance, there would be no positive influence of authentic leadership on employee job satisfaction. The employees in such a scenario would not perceive that they are genuinely supported by the leader, being treated in a fair and caring manner, or receive positive appraisal for their individual efforts. Thus:

Hypothesis 2. Leader self-perceptions and followers' perceptions of authentic leadership interact in predicting employees' job satisfaction. Employees are most satisfied at work when both leader self-perceptions and followers' perceptions of authentic leadership are high, i.e., when both perceptions are aligned at high levels.

3. Research framework and methodology

3.1. Sample and procedures

Empirical data in a Slovenian manufacturing and processing company were collected in February 2012. The company manufactures composite materials, with an important role of R&D, which is why the work is organized in teams, where team members are highly engaged in interaction with each other and with their supervisors. A translation-back translation procedure was used to translate the questionnaire from English to Slovenian and back to English (Brislin, 1986). We collected data on a sample of leaders (team or group supervisors) and their direct reports (employees, followers, team members).

All the employees who could be divided into specific work groups with direct supervisors were invited to participate. In total, 24 team supervisors and 171 of their employees answered. The questionnaires included team and employee identification codes so the respondents would be guaranteed anonymity and confidentiality, but data from the supervisors and the employees could be matched and grouped for analysis. The employees were asked to complete the questionnaires individually, without talking to each other. The average response rate per team is 7.13 employees, whereas a number of direct reports per team supervisor that had answered ranges from 4 to 18. If we take into consideration only the 24 teams that participated in full (where we obtained both supervisor response and at least two employees' responses; 76.6% team response rate), it is a 71.25% rate of response of the supervisors' direct reports (within-group response

rates ranged from 20% to 100%). Nearly 66% of the participants were male and roughly 38% were younger than 26 years old ($SD = 5.89$). A large majority (70%) of respondents reported less than seven years of work experience ($SD = 4.57$), while 43% reported less than three years of work experience with a particular supervisor (dyad tenure: $SD = 3.62$).

3.2. Measures

A structured questionnaire with 7-point Likert-type scales with anchors “7 = Totally agree” and “1 = Completely disagree” was used for measuring all the constructs in this study besides the five control variables listed last.

3.2.1. Authentic leadership. Both leader self-perceptions and follower perceptions of authentic leadership were measured with Authentic Leadership Inventory (ALI), a 16-item scale with four sub-dimensions previously discussed in the theory section (self-awareness, balanced processing, internalized moral perspective, and relational transparency) developed by Neider and Schriesheim (2011). Sample item: *My leader openly shares information with others*. In terms of leader self-perceptions of authentic leadership, the items were adapted to concern one’s own authenticity (for example, *I openly share information with others*). We followed the approach taken by previous studies and combined authentic leadership dimensions into one common core construct (e.g. Walumbwa et al., 2010).

3.2.2. *Job satisfaction* was measured using four items taken from the Hackman and Oldham (1980) job diagnostic scale. Sample item: *I am generally satisfied with the kind of work I do in this job*. It was self-reported by the employees.

3.2.3. *Control variables*. We controlled for social identity as it can influence the relationships between leadership and outcomes (Ellemers, Gilder & Haslam, 2004). We used a scale by Luhtanen and Crocker (1992), who conceptualize social identity as collective self-esteem - beliefs that stem from the groups individuals are part of. We used a subscale of private collective self-esteem, which measures the evaluation of employee's group (Luhtanen & Crocker, 1992). We also controlled for leader-member exchange (LMX; a scale by Graen and Uhl-Bien, 1995), which has been demonstrated to be a significant predictor of employees' job satisfaction (Graen, Novak & Sommerkamp, 1982). We controlled for work engagement, which Giallonardo et al. (2010) found to partially mediate the relationship between authentic leadership and job satisfaction. It was measured using a short 9-item UWES scale (Schaufeli, Bakker & Salanova, 2006).

We also controlled for age, gender, employee education, and expertise (for which a proxy of work experience was used). In addition, we controlled for dyad tenure (that reflects for how long an employee has been working within the supervision of a particular direct supervisor) as the length of the supervisor-subordinate relationship can

impact on perceptions regarding their work (Fagenson-Eland, Marks, & Amendola, 1997). All control variables were self-reported by the employees.

4. Results

4.1. Descriptive statistics, validity and reliability

Table 1 provides descriptive statistics of all variables analyzed in this study. We began by observing the factor structure of the focal variables and thus conducted a confirmatory factor analysis using AMOS 17 software with maximum likelihood estimation procedures. The expected three-factor solution (leader self-perceptions of authentic leadership, follower perceptions of authentic leadership, and job satisfaction) displayed good fit with the data (Chi-square [591] = 1234.13, CFI = 0.973, SRMR = 0.031). The factor loadings ranged from 0.77 to 0.95 for follower perceptions of authentic leadership items, 0.75 to 0.92 for leader self-perceptions of authentic leadership items, and 0.64 to 0.86 for job satisfaction items.

(Table 1 about here)

4.2. Multilevel analysis results

The dataset consisted of two hierarchically nested levels: 171 employees (level-1) nested within 24 groups (level-2), which all had one group supervisor. We first used hierarchical linear modeling (i.e. random coefficient modeling) to test the following aspects of our multilevel model: (1) the existence of a multilevel structure, (2) the cross-

level effect of leader self-perceptions and follower perceptions of authentic leadership on employee job satisfaction, and (3) the interaction effects between leader self-perceptions and follower perceptions of authentic leadership in predicting employees' job satisfaction.

The ICC (intraclass correlation) for job satisfaction was .12, indicating a relatively high degree of association of these outcomes between individuals within the same group. Following Hayes' (2006) recommendation to use multilevel modeling in situations where intraclass correlations exceed .05, the ICC results of the intercept-only model justified our use of a multilevel analysis as an appropriate strategy for analyzing the cross-level effects of various constructs on employees' job satisfaction.

To test our hypotheses, we developed a set of multilevel models based on the theoretical predictions using the incremental improvement procedure demonstrated by Hox (2010). The fixed effects with robust standard errors for all models are presented in Table 2. We started with the intercept-only model with team members' job satisfaction as the dependent variable (Model 1). In the next step, we added all control variables (Model 2).

(Table 2 about here)

To test the cross-level effects of authentic leadership, we added both leader self-perceptions and follower perceptions of authentic leadership together to Model 2

(Model 3). We examined the coefficients of corresponding parameters estimated in the models. Follower perceptions of authentic leadership was positively related to employees' job satisfaction ($\gamma = 0.22$, $SE = 0.07$, $p < 0.05$), supporting Hypothesis 1, whereas the leader perceptions of authentic leadership construct was not ($\gamma = 0.08$, $SE = 0.09$, ns). In Model 4, we tested for an interaction effect between leader self-perceptions and follower perceptions of authentic leadership in predicting employees' job satisfaction. The interaction was significant (0.19 , $SE = 0.05$, $p < 0.05$), providing initial support for Hypothesis 2. The interaction effect between both measurement perspectives of authentic leadership indicates that optimal levels of employees' job satisfaction can be achieved when follower perceptions of authentic leadership interact with leader self-perceptions; when both are at its highest levels.

We wanted to go one step further and examine how congruence (agreement) between leader self-perceptions and follower perceptions of authentic leadership predicts employees' job satisfaction (Figure 1). We applied polynomial regression analysis and response surface modeling (Edwards & Parry, 1993). Polynomial regression procedures to examine (in)congruence hypotheses avoid many shortcomings, such as the reliance on simple statistical techniques apparent in much of the previous difference scores research (e.g. correlation or calculated gap score) (Edwards, 1994; Fleenor et al., 2010). Combined with the response surface methodology, this approach allows for a more precise description and evaluation of the difference scores (Edwards & Parry, 1993).

Authentic leadership values (both self-reports and follower perceptions) were centered by a common value midway between their means (Shanock et al., 2010) to reduce multicollinearity between the component measures and their associated higher-order terms (Aiken & West, 1991).

(Figure 1 about here)

The slope of the line of perfect agreement (leader self-perceptions = follower perceptions) as related to job satisfaction is given by $a_1 = (b_1 + b_2)$, where b_1 is the unstandardized beta coefficient for the centered leader self-perceptions of authentic leadership variable and b_2 is the unstandardized beta coefficient for the centered follower perceptions of authentic leadership variable (see Shanock et al., 2010). The curvilinear slope on the incongruence line (leader self-perceptions = - follower perceptions), which is given by $a_4 = b_3 - b_4 + b_5$, (where b_3 is the β for leader perceptions of authentic leadership squared, b_4 is the β for the cross-product of follower- and leader- perceptions, and b_5 is the β for follower-perceptions squared; see Shanock et al., 2010) is significant and positive, providing further support for Hypothesis 2¹.

¹ We've made a supplementary analysis examining the congruence between leader self-perceptions and follower perceptions for each authentic leadership dimension (self-awareness, internalized moral perspective, balanced processing and relational transparency) separately. The results are not substantively different as the high-high combination in each of the four dimensions appears to be the most beneficial for stimulating employee job satisfaction.

Response surface methodology also enables us to examine how the direction of the discrepancy (when one predictor is higher than another) between two predictor variables (leader self-perceptions and follower perceptions of authentic leadership) is related to job satisfaction. Our Hypothesis 1 that predicted that follower perceptions of authentic leadership would relate to employee job satisfaction was supported. In line with this thinking, we could expect to find that when there is incongruence between the two measurement perspectives in a way that follower perceptions of authentic leadership are high and leader perceptions are low, this would still predict employee job satisfaction. However, the slope of the line of incongruence as related to job satisfaction, indicating the direction of the discrepancy (follower perceptions of authentic leadership higher than leader self-perceptions or vice versa), which is assessed by calculating $a_3 = (b_1 - b_2)$, is insignificant. This provides further justification for our claim that both follower perceptions and leader self-perceptions of authentic leadership need to be in agreement and at high levels (only follower perceptions of authentic leadership seem to be insufficient) to influence job satisfaction, providing final support for Hypothesis 2.

5. Discussion

Theoretical models that are derived from the recently very popular scientific field of authentic leadership suggest that because of this leadership style, various employee outcomes would improve (Avolio et al., 2004; Avolio & Gardner, 2005; Gardner et al., 2005; Ilies et al., 2005). This is supported by past empirical research findings (e.g.

Walumbwa et al., 2008; Walumbwa et al., 2010; see Gardner et al., 2011). However, the authors have previously only focused on examining these relations from one perspective, mostly from the perspective of the employees, thus investigating follower perceptions of authentic leadership. In our quest to provide more accurate and holistic empirical evidence regarding the relationship between authentic leadership and employees' job satisfaction, we took a different approach and measured leader self-perceptions and follower perceptions of authentic leadership simultaneously.

Our initial results indicate that the leaders perceived as more authentic by the employees are better at fostering higher follower job satisfaction. This finding, related to perceived authentic leadership, is consistent with results of the study of Walumbwa et al. (2008). We thereby replicated previous findings by using a different, more recent measure of authentic leadership (ALI; Neider & Schriesheim, 2011), and added bulk to previous studies that found support for its positive influence on beneficial individual outcomes (e.g. Walumbwa et al., 2008; Walumbwa et al., 2010).

We provided additional insight by measuring authentic leadership from two perspectives and comparing their predictive value, demonstrating that only follower perceptions of authentic leadership, not leader self-perceptions, are positively related to employees' job satisfaction. Our study highlighted key differences in results that are related to the two measurement approaches. Social construction and follower-centric perspective on authentic leadership seems comparatively more important when trying to

enhance employees' job satisfaction. It is more important for the leaders to invest in the development of open, genuine relations with the followers rather than only enhancing their own authentic characteristics. These must be clearly evident to the employees for them to become more satisfied at their job. The followers that work under the guidance of supervisors they perceive as more authentic are more satisfied in their workplace. Such employees are more motivated, which is demonstrated by meta-analytical evidence to contribute to their job performance (Judge et al., 2001).

However, even if leader self-perceptions of authentic leadership failed to exhibit a positive cross-level relationship with employees' job satisfaction, our results partially support for the use of this measurement perspective, as well. We found a significant interaction effect between leader self-perceptions and follower perceptions of authentic leadership in predicting job satisfaction, indicating that the employees would be most satisfied at their workplace when they work for a leader that is seen as authentic both by the employees and by the supervisor him- or herself. A combination of leader- and follower-centric perspectives that focuses both on personality traits and leaders' behavior, as well as on followers' social construction and perceptions, was supported to be more informative in the form of interaction effects that added significant explanatory power to the examined research models. As follower perceptions of leaders often express more about the cognitive structures of followers rather than leaders (Hunt, 1996), following only the follower-centric perspective seems bound to include some

biases, as well. By also capturing leader self-perceptions, we manage to include the leader-centered approach into the research model. Authentic leadership is inherently related to personal processes (Avolio & Gardner, 2005), which are concealed to others and only available to individuals themselves through introspection.

In addition to examining the unique predictive value of the two measurement approaches and to testing the interaction between them, we also examined the congruence between the two measurement approaches. Higher consistency between authentic leadership investigated from two measuring strategies indicates that leaders and followers perceive the leader's authenticity similarly. This is more likely to occur in case of genuine, transparent, and open relations. We have shown that both follower perceptions and leader self-perceptions of authentic leadership need to be in agreement and at high levels (only follower perceptions of authentic leadership seem to be insufficient) to exhibit "true" authentic leadership and influence job satisfaction.

5.1. Theoretical contributions

An important contribution of this article lies in the operationalization of authentic leadership as a construct measured through perceptions by both the leader and the employees. We tapped into the authentic individual-authentic leadership behavior-authentic leadership perception debate and tried to partial out the biases related to applying only one measurement perspective. We theorized and empirically examined both leader and follower-centric perspectives on leadership and integrated them into one

research model. To the best of our knowledge, this has not yet been done in authentic leadership research. The multilevel model, supported by empirical field data, addresses the call made by Gardner et al. (2011) to also account for the group-level influence of authentic leadership. Simultaneous measuring of authentic leadership by the leaders themselves and by the followers, as suggested by Cooper et al. (2005), is thereby the most important contribution of this study. We add to our understanding of authentic leadership by implementing both perspectives concurrently. Our findings supported theoretical assumptions and authors' recommendations (e.g. Cooper et al, 2005; Eagly, 2005; Shamir & Eilam, 2005; Harvey et al., 2006; Fields, 2007; Yammarino et al., 2008) that authentic leadership has to be investigated by means of various sources simultaneously, as the results obtained from only one perspective are not equivalent due to subjective perceptions and various factors affecting self and others' ratings (see Fleenor et al., 2010).

Thus, based on our findings, what makes someone "truly" authentic or not? Is it any individual in which authenticity resides, how it is perceived by others, or both? Even if the answer to this may be rather difficult to find, researchers should be aware of the different perceptions concerning authenticity and also be aware of drawbacks of ascertaining authenticity by only taking one perspective. For establishing genuine authenticity, we cannot rely merely on information acquired from one side (either from the leader or from the follower) involved in the dyadic relationship at work. Our

interaction and congruence analyses contributed to the discussion about whether the leaders can identify whether their characters are authentic (leader-centric perspective), or are the followers the ones who can evaluate the degree of authenticity regarding their supervisor's behaviors (follower-centric approach based on social construction). Both self-perceptions and follower perceptions should not only be accounted for, but be present at high levels simultaneously and in agreement for the leaders to exert their influence on job satisfaction. Authentic leadership is thus a collective product created by the leader-follower interaction, which may be an indication of "true" authentic leadership. It is the mutual understanding of situational imperatives and behavioral cues of both parties involved that can label leaders' behavior as genuinely authentic.

Armed with this information, we attempt to provide a complementary interpretation of research results, speculatively reinterpreting existing findings on this field. We focus only on studies examining job satisfaction as an outcome of authentic leadership (e.g. Jensen & Luthans, 2006; Giallonardo et al., 2010; Wong & Laschinger, 2013). All of them used cross-sectional data gathered from the employees, thus measuring follower-reported authentic leadership. They found, similar to the first part of our study, a significant main relationship between follower-reported authentic leadership and employee job satisfaction, be it in the context of entrepreneurship or nursing management. Shedding some new light on these existing studies based on our findings, we can speculate that the researchers tapping only into follower-rated authentic

leadership measured only one segment of authentic leadership. Our response surface analysis, particularly the insignificant line of incongruence as related to job satisfaction when follower reported authentic leadership is high and self-reported is low, pointed out the fact that the significant main effect of follower-rated authentic leadership does not reveal the whole story. The approach of the majority of the studies on this field thus results in a too broad evaluation of the leaders that are supposedly authentic, while only the ones with a congruent assessment both by the leaders themselves and their followers should be labeled as such. Examining only this, presumably a more limited group of leaders, would be an indication of “true” authentic leadership, which we can speculate would result in a stronger relationship with employee job satisfaction. Similar could be stated for other studies that investigated other authentic leadership outcomes (e.g. Walumbwa et al., 2010; Woolley et al., 2011; Černe, Jaklič & Škerlavaj, 2013), as well.

5.2. Managerial implications

Empirical support for positive benefits of authentic leadership serves as further evidence to the fact that authentic leadership in organizations is useful, as it leads to employees' job satisfaction. The positive between authentic leadership and this outcome found in this study is in line with previous research (see Gardner et al., 2011). This further depicts authentic leadership as a suitable leadership style at work for enhancing employee outcomes. The supervisors striving to improve employees' job satisfaction should make an effort to develop their own personal characteristics and particularly

behavioral patterns towards authenticity. The leaders should proactively develop skills and capacities related to authentic leadership. However, our study serves as a warning that merely developing these traits (individual authenticity) is not sufficient.

Our study highlighted the fact that the leaders should explicitly focus on the development of authentic relations with the employees. Through sincere, open, and transparent relations via role-modeling and leading by example, the leader's true self (individual authenticity) will become apparent to the followers. This way, the employees will be more satisfied with their work, which has been demonstrated by meta-analytical evidence to positively influence their performance (Judge et al., 2001).

In the case when either the leaders themselves or the followers perceive the leader as authentic, it does not necessarily mean that this is the most accurate assessment leading to beneficial outcomes. Authentic leadership should be both self-ascribed—for the managers to achieve high levels of self-awareness and internalized moral perspective—as well as follower-perceived—for the employees to recognize these authentic traits through transparent relations. Leader self-perceptions of authentic leadership may have stronger influence on employee outcomes when it is clearly demonstrated to the followers, which is the most important managerial implication of our research. High levels of leader self-perceptions of authentic leadership can optimally stimulate employees' job satisfaction in congruence with followers' perceptions of high levels of authentic leadership.

5.3. Limitations and future research suggestions

The first methodological limitation is related to potential issues of measuring authentic leadership through perception due to attribution errors either in self-perception (in the case of leaders) or in assessing others (in the case of followers). Perceptions are always subjective and liable to cognitive biases. The measurement instrument we have used also includes some limitations or imperfections that are endemic to the research of leadership by means of questionnaires in general. Thus, it does not consider various contextual factors that may impact leaders' behavior, as well as largely neglects the perceptions of this behavior within existing contingencies. Due to the cross-sectional nature of our research design, we cannot draw definitive conclusions regarding causality. Reverse or reciprocal causation may be possible; supervisors might be perceived as more authentic because their employees are very satisfied with their jobs. In addition, our sample size at the group level (24 supervisors) is rather small for testing and interpreting cross-level interactions. Longitudinal research on larger samples involving a higher number of supervisors would certainly be useful to establish causality and depict patterns of leadership-subordinate interactions over time (Rank et al., 2009). Experimental studies that could manipulate authentic leadership in an isolated setting could also help in ascertaining causal claims.

Related to the point above regarding the measurement through (self and other) perceptions, there is a particular issue² with using one's self-awareness (the followers') to assess the self-awareness of others (i.e. the leaders'). We conceptually touched upon this matter in the theory section, but were unable to tackle it to full extent because we ultimately followed a simpler approach that advocates for and examines congruence (which would presume the same adapted questionnaire is used both for the followers and the leaders). We did also make a supplementary analysis examining the congruence in all four authentic leadership dimensions separately, however, issues regarding presupposing that the same conceptualizations apply to both leader and follower perspectives remain. Particularly self-awareness and the issue of how well can followers assess this leadership dimension is a problematic concept warranted of future conceptualizations and operational solutions that might go beyond simply adapting the same questionnaire to concern self- or other-assessments.

The construct of authentic leadership is a relatively new phenomenon in leadership research, and is consequently still being developed. Additional work in building the theoretical conceptualization, as well as in further empirical confirmation of theoretical propositions, will be required in the future. The researchers should develop various research models instead of only following basic theoretical foundations, as pointed out in a recent review by Gardner et al. (2011). For example, a lack of focus on authentic

² We would like to thank the anonymous reviewer for highlighting this issue.

followership is apparent in empirical studies. This process could prove to have an important mediating role between authentic leadership and employee outcomes, but is crucially dependent on employees' perceptions and traits, not only on leaders' characteristics and behavior. Therefore, followers' individual differences, their reactions to authentic leadership, and employees' authentic followership development should be included in future research.

The ability of supervisors to influence their followers' perceptions and outcomes is superior if their authenticity and integrity are recognizable to a larger number of employees (Avolio & Gardner, 2005). This might be particularly true if consensus about a leader's authenticity reigns among the employees (Fields, 2007), for example, via the development of rumors (Michelson & Mouly, 2002), but also between the leader and his or her followers. This helps to build higher levels of employee trust in the leaders, which allows the leaders to successfully spread their influence (Burke, Sims, Lazzara, & Salas, 2007). Because of this consensus, it is essential for leaders to consistently act in accordance with the image the followers have created of them in order to not undermine the trust the followers had developed in them. This may naturally be the least difficult if the leaders constantly behave in accordance with their true self. For future research, we suggest that the researchers should focus on the consensus regarding leaders' authenticity among their followers (see Fields, 2007) and empirically examine leaders'

attributes as well as situational aspects that could impact on how much followers agree that a particular leader exhibits authentic leadership.

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Table 1. Descriptive Statistics and Correlations for Individual-Level Variables ^{a, b}

	N	M	SD	1	2	3	4	5	6	7	8	9	10
1 Social identity	171	5.02	1.38	(0.897)									
2 Job satisfaction	171	4.65	0.98	0.28**	(0.898)								
Leader-member													
3 exchange (LMX)	171	5.43	0.82	0.12*	0.22**	(0.801)							
Perceived authentic													
4 leadership	171	5.55	0.84	0.32**	0.36**	0.61**	(0.940)						
5 Age	171	28.7	5.89	-0.08	-0.07	0.10	0.11	-					
6 Gender	171	1.67	0.51	0.10	-0.06	-0.10	-0.09	-0.12	-				
7 Education	171	3.39	1.00	0.02	0.08	0.09	0.08	-0.29**	-0.04	-			
8 Expertise	171	5.52	4.57	-0.06	0.09	0.08	0.14*	0.36**	-0.16*	-0.20**	-		
9 Dyad tenure	171	3.97	3.62	-0.13	0.14*	0.12*	0.19**	0.26**	-0.26**	0.06	0.31**	-	
10 Work engagement	171	4.89	1.11	0.20**	0.45**	0.15*	0.32**	-0.10	-0.02	0.03	0.01	0.12*	(0.745)

^a Values in parentheses on the diagonal are inter-item reliability levels (Cronbach's alpha).

^b * $p < 0.05$, ** $p < 0.01$.

Table 2. Self-follower Authentic Leadership Perceptions Discrepancy as Predictor of Job Satisfaction (Multilevel Analysis Results) ^{a, b, c, d}

	Model 1	Model 2	Model 3	Model 4	Model 5
<i>Level 1</i>					
Intercept	4.234** (0.03)	4.354** (0.13)	4.356** (0.12)	4.367** (0.14)	4.43** (0.34)
Age		-0.03 (0.03)	-0.03 (0.03)	-0.04 (0.03)	-0.03 (0.03)
Gender		0.08 (0.05)	0.05 0.05 (0.05)	0.07 (0.05)	0.08 (0.05)
Education		0.05 (0.04)	0.04 -0.06 (0.04)	0.06 (0.04)	0.05 (0.04)
Expertise		-0.11 (0.08)	-0.12 (0.09)	-0.07 (0.04)	-0.08 (0.05)
Dyad tenure		0.20** (0.06)	0.21** (0.07)	0.18** (0.07)	0.19** (0.06)
Social identity			0.30** (0.07)		0.28** (.11)
Work engagement		0.32** (.12)	(.11)	0.27** (.12)	
Leader-member exchange (LMX)		0.22** (0.04)	0.20** (0.05)	0.21** (0.05)	0.20** (0.04)
Follower perceptions of authentic leadership			0.22** (0.07)	0.20** (0.07)	0.19** (0.07)
Follower perceptions of authentic leadership ²					-0.20* (.09)
<i>Level 2</i>					
Leader self-perceptions of authentic leadership			0.08 (0.09)	0.09 (0.10)	0.09 (0.12)
Leader self-perceptions of authentic leadership ²					-0.07 (0.11)
<i>Interaction effects</i>					
Leader self-perceptions X follower perceptions of authentic leadership				0.19** (0.05)	0.19** (0.08)
<i>Surface tests</i>					
<i>a</i> ₁					0.29** (0.08)
<i>a</i> ₂					-0.08 (0.06)
<i>a</i> ₃					-0.11 (0.23)
<i>a</i> ₄					-0.46* (0.21)
Deviance	1267.56	1248.42	1219.65	1214.18	1228.36
Pseudo R ²		0.05	0.22	0.24	0.25

^a Entries are estimations of fixed effects with robust standard errors.

^b * $p < 0.05$, ** $p < 0.01$.

^c a_1 ($b_1 + b_2$) and a_2 ($b_3 + b_4 + b_5$) represent the linear and curvilinear slopes along the congruence line, respectively.

^d a_3 ($b_1 - b_2$) and a_4 ($b_3 - b_4 + b_5$) represent the linear and curvilinear slopes along the incongruence line, respectively.

Figure 1. Levels of agreement between leader self-perceptions and follower perceptions of authentic leadership in predicting employee job satisfaction (polynomial regression analysis results)

