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Examining Mindfulness and Its Relations to Humility, Motivation to Lead, and Actual Servant Leadership Behaviors

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Abstract This research aimed to examine mindfulness and its relation to servant leadership, an approach that makes humility and altruism the central components of the leadership process. Two empirical studies were conducted in order to test the hypotheses under investigation. Study 1 used a nonleader sample and showed a positive relationship between dispositional mindfulness and humility as well as a non self-centered motivation to lead, both representing essential features of a servant attitude. On this basis, Study 2 used a leader sample and investigated the relationship between leaders' dispositional mindfulness and actual servant leadership behaviors as perceived by their followers. The findings revealed that leaders' dispositional mindfulness was positively related to direct reports' ratings of the servant leadership dimensions humility, standing back, and authenticity. In summary, data support the utility of including mindfulness as a predictor in servant leadership research and practice.

Keywords Mindfulness · Humility · Motivation to lead · Servant leadership

Introduction

In the past three decades, mindfulness has gained much interest in various fields of research, showing that dispositional mindfulness as well as mindfulness-based interventions are an efficient route to psychological functioning in clinical and nonclinical populations (e.g., Baer 2003; Grossman et al. 2004; Karelaia and Reb 2015). A limited but growing body of work examines the effects of mindfulness in the workplace. Recently, scholars have started to develop theoretical frameworks on the potential role of mindfulness in predicting work-related outcomes such as task performance (Dane 2011) and employee well-being (Glomb et al. 2011). Moreover, a number of empirical studies revealed positive relationships between employees' mindfulness and well-being as well as positive work-related attitudes and behaviors (Dane and Brummel 2014; Hülsheger et al. 2013, 2014; Malinowski and Lim 2015; Reb et al. 2015a; Schultz et al. 2014). Nonetheless, empirical research on mindfulness in the workplace is still scarce. This is particularly true for the domain of leadership. Existing approaches on potential benefits of mindfulness for leaders are mostly theoretical in nature (Reb et al. 2015b; Sauer and Kohls 2011), while little empirical insights are available. For example, Roche et al. (2014) confirmed beneficial effects of mindfulness for leaders. In their study, leaders' mindfulness was associated with less dysfunctional outcomes such as anxiety, depression, negative affect, and burnout. Another study looked at the potential effects of leaders' mindfulness on followers. Reb et al. (2014) assessed leaders' mindfulness and found positive associations with employee well-being and performance. However, these studies have neither investigated the relationship between mindfulness and leadership motivation nor has mindfulness been linked to specific leadership behaviors as perceived by followers. Accordingly, Reb et al. (2014) have explicitly voiced the need for research to shed light on the relationship between leader mindfulness and existing leadership constructs.

Servant leadership is based on the premise that the best way to motivate followers is through developing them to their full potential while replacing leaders' self-interest with service to others as the basis for using power (Greenleaf 2002). On this

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basis, servant leadership has been described as "an understanding and practice of leadership that places the good of those led over the self-interest of the leader, emphasizing leader behaviors that focus on follower development, and de-emphasizing glorification of the leader" (Hale and Fields 2007, p. 397). Over the last decade, a great deal of research has been devoted to servant leadership resulting in a growing body of empirical evidence demonstrating that servant leadership is related to a wide array of positive work-related attitudes and effective job behaviors (Liden et al. 2014a; Van Dierendonck 2011; Parris and Peachey 2012) as well as tangible organizational success (Liden et al. 2014b; Peterson et al. 2012). In these studies, servant leadership predicted meaningful incremental variance in follower and organizational outcomes above the most commonly studied approaches to leadership (such as leader-member exchange and transformational leadership), making servant leadership a legitimate and well-established topic in the academic field. Moreover, given the strong emphasis on service and people orientation, research and practice have increasingly stressed the promise of servant leadership for meeting the unique leadership challenges of globalized environments (Irving 2010). Compared with other views on leadership, the unique element in servant leadership is the combined motivation to lead with altruism (Van Dierendonck 2011), positioning the servant leader as "first among equals" (Greenleaf 2002). Accordingly, servant leadership has consistently been associated with the virtues of humility (Liden et al. 2014b; Van Dierendonck 2011) and a non self-centered motivation to lead (Smith et al. 2004). It is thought that when leaders are humble and do not expect rewards or privileges for leading but support followers to unfold their full potential, followers in turn identify with the leader and engage in appropriate behaviors, not through coercion but rather through convincement (Greenleaf 2002).

With the above in mind, mindfulness appears to be uniquely suited to predicting general humility in individuals as well as a nonegoistic motivation when it comes to strive for leading others. If this assumption holds, then it is plausible that mindfulness also fosters concrete servant leadership behaviors, as exhibited by actual leaders.

Within the psychological literature, mindfulness has traditionally been conceptualized as a "kind of nonelaborative, nonjudgmental, present-centered awareness in which each thought, feeling, or sensation that arises in the attentional field is acknowledged and accepted as it is" (Bishop et al. 2004, p. 232). Most researchers agree that mindfulness represents an inherent human capacity and can thus be experienced by everyone. This capacity, however, varies in strength across individuals and situations. Whereas many researchers have focused on mindfulness as a psychological state (Bishop et al. 2004; Brown and Ryan 2003), it has also been conceptualized as a dispositional variable that can be assessed by using self-report measures (Bergomi et al. 2013; Sauer et al. 2013).

Intuitively, humility can be defined as a "characteristic and enduring way of being more humble, modest, respectful, and open-minded than arrogant, self-centered, or conceited" (Peters et al. 2011, p. 155). Recently, several researchers synthesized previous interpretations of humility and specified its content domain (Chancellor and Lyubomirsky 2013). An influential perspective was introduced by Owens et al. (2013), focussing on expressed behaviors that demonstrate humility and how others perceive these behaviors. Specifically, he defined expressed humility along three components. The first component refers to the willingness to actively seek accurate self-knowledge. This means that humble individuals strive to obtain a more objective picture of their personal strengths and limitations by actively using and requesting information from their environment about the self. The second component builds on the notion that humility includes an increased valuation of others and not a decrease in the valuation of oneself (Chancellor and Lyubomirsky 2013). Accordingly, humble individuals display appreciation of others' positive worth, strengths, and contributions without adopting a competitive attitude or feeling threatened. The third component is teachability which refers to the recognition of one's fallibility and showing openness to learning and feedback from others. Thus, humble individuals willingly ask for help and show receptiveness to others' input and advice.

The proposed link between mindfulness and humility builds on several theoretical rationales. Most importantly, it draws on the work of Shapiro et al. (2006), who argued that mindfulness facilitates a significant shift in perspective, referred to as "reperceiving." Reperceiving is described as the capacity to adopt a detached stance on one's thoughts and emotions focusing on the genuine awareness of experiences instead of their content. Naturally, this shift from a self-centered (i.e., narcissistic), subjective perspective to a more objective perspective is very likely to result in greater humility. Specifically, by standing back and observing, individuals gain access to more self-relevant information (Shapiro et al. 2006), including one's limitations, weaknesses, and mistakes. In line with this, a study by Lakey et al. (2008) found that mindful individuals showed less defensiveness in response to self-relevant information and are thus more likely to develop accurate self-knowledge. Similarly, through the process of reperceiving, individuals may also become less controlled by particular thoughts and emotions (e.g., the self-centered focus on own strengths and achievements) and are hence less likely to engage in automatic, habitual response patterns (e.g., following impulses or preconceived notions) but instead be more open to new approaches and views (e.g., input and ideas from others).

Much of what has been said above is in line with the central tenets of self-determination theory (Deci and Ryan 2000), which complements the theoretical basis for the proposed effects of mindfulness. In fact, research has consistently shown

that mindfulness is positively associated with more autonomous self-regulation (Brown and Ryan 2003) and that individuals scoring high on dispositional mindfulness are more likely to strive for intrinsic (relative to extrinsic) aspirations (Brown and Kasser 2005). In other words, mindfulness is thought to foster a secure and accepting self-concept that is not hypersensitive to ego threats. Such a stable self-concept enables individuals to engage in certain activities or behaviors more for inherent satisfaction than for external reinforcement. Moreover, it helps to manage self-relevant information more accurately (e.g., without perceiving oneself in an overly favorable manner) as well as to be more open to feedback from others and to grow from it. On this basis Niemiec et al. (2008, p. 112) concluded "that mindfulness fosters a motivational orientation marked by self-endorsed, noncontingent behavior and goal pursuits that reflect less egoistic functioning".

Following the above arguments, it is expectable that individuals scoring high on mindfulness are not primarily concerned with their individual benefit when striving for a leadership position. The literature distinguishes three components of motivation to lead that account for individual differences in striving for or accepting a leadership position (Chan and Drasgow 2001). The affective component refers to individuals who simply enjoy leading others. The social-normative component describes individuals who are willing to accept a leadership position out of a sense of duty and obligation. The noncalculative component accounts for individuals who do not consider the costs of leading relative to the benefits. Individuals scoring low on this dimension are primarily concerned with their own interests and would thus only accept a leadership position if this benefits themselves. Whereas the underlying theory provides little direction for linking mindfulness to affective and social-normative motivation to lead, it is plausible that mindful individuals, who are more able to step back from the sole focus on their own selves, will be more likely to exhibit a noncalculative (i.e., humble) motivation to lead (i.e., more mindful individuals have a weaker calculative and less self-centered motivation to lead).

A positive association between mindfulness and humility as well as a non self-centered motivation to lead would suggest that this pattern is reflected in the context of actual servant leadership as well. More specifically, the focus herein is on those dimensions of servant leadership that according to the integrative servant leadership model developed by Van Dierendonck and Nuijten (2011) represent the genuine "servant-side" of servant leadership and thus make servant leadership a truly unique leadership concept. According to their conceptualization, the genuine servant-part of servant leadership is about "being able to be authentic and stand back, thereby allowing the employees to flourish" (Van Dierendonck and Nuijten 2011, p. 261). Three specific dimensions describe genuine servant leadership behaviors. The key dimension is humility, which relates to a leader's awareness of his/her

limitations and the willingness to seek the contributions of others to overcome these limitations. Thus, a servant leader owns up to his/her mistakes and learns from the different views and opinions of others. Second, closely related to humility is standing back, which describes the degree to which a leader explicitly shifts the focus away from him-/herself and recognizes the contributions of others. A servant leader shares credit for successes with others and prefers to stay in the background, when a task has successfully been accomplished. Third, authenticity is about being true to oneself and refers to behavior that is consistent with internalized values, preferences, and needs. Accordingly, a servant leader expresses his/her true intentions, motivations, and emotions to others.

By again building on the concept of reperceiving (Shapiro et al. 2006) as well as self-determination theory (Deci and Ryan 2000), I proposed that leader's dispositional mindfulness would have a unique effect on the genuine servant-part of servant leadership. In fact, standing back from one's own personal points of reference is a key factor of servant leadership and allows leaders to develop a sense of humbleness and acceptance and thus to focus on the growth and development of others. This is fully in line with Reb et al. (2015b), stating that "servant leadership requires a certain detachment and transcendence of the immediate pursuit of personal needs to prioritize those of others" (p. 276). Therefore, I expected leaders' mindfulness to be positively related to the humility and standing back components of servant leadership. Moreover, achieving distance and the ability to nonjudgmentally observe the contents of consciousness may also help leaders to strengthen what Deikman (1982) referred to as "the observing self." On this basis, they are more likely to process their basic values and needs in a less biased manner resulting in a higher level of authenticity (Heppner and Kernis 2007). Support for this comes from studies linking mindfulness to authentic functioning (Lakey et al. 2008; Leroy et al. 2013) as well as research showing that mindful individuals act in ways that are more congruent with their basic values and needs (Brown and Ryan 2003). Again, this notion is corroborated by the tenets of self-determination theory. According to Van Dierendonck (2011), self-determined leaders who believe in their own worth and efficacy are able to put themselves in perspective and are thus less inclined to seek power for its own sake, which is central to the notion of servant leadership.

Taken together, the present research aims at investigating the association between dispositional mindfulness and outcome variables pertaining to servant leadership. Specifically, three hypotheses were tested. Hypothesis 1 predicted a positive relationship between mindfulness and expressed humility. Hypothesis 2 assumed a positive relationship between mindfulness and a less self-centered motivation to lead. On this basis, hypothesis 3 stated that mindfulness is positively related to specific servant leadership behaviors (i.e., humility, standing back, authenticity).

Study 1

Study 1 was designed to test hypotheses 1 and 2, assuming that mindfulness is positively related to expressed humility and a less self-centered motivation to lead.

Method

Participants

In this study, a nonleader sample from the German population was used, including self- and other-ratings of target constructs. One hundred and four self-ratings of mindfulness and motivation to lead of focal individuals were matched with other-ratings of expressed humility. On average, the focal respondents were 29.9 years old (SD = 8.6) and the majority (69 %) was male. Sixty-seven percent held a university degree, 22 % a high school diploma, and 11 % of the focal participants had finished primary or other schooling without a high school diploma. With regard to other-ratings, 33 % of the raters were significant others of the focal individuals, 13 % were family members, 34 % were close friends, and 18 % were colleagues at work. Finally, only 2 % indicated to be a casual acquaintance of the focal individual.

Procedure

Snowball sampling starting from the author's personal network was used to recruit potential participants. Respondents were contacted online and asked to provide self-reports on the target constructs (i.e., mindfulness and motivation to lead). Then, participants were asked to forward a separate online survey to at least one close acquaintance (i.e., significant other, close friend, co-worker). In the separate survey, other-ratings on the focal individual's expressed humility were collected. Self-generated, anonymous identification codes were used to match self- and other reports. Survey participation was incentivized by offering a raffle of four € 25 Amazon gift cards. Out of 183 focal individuals who accessed the survey, 154 provided complete self-reports on the target constructs. Regarding the other-ratings, 167 individuals accessed the survey out of which 127 completed all relevant items. In sum, 93 focal individuals were rated by one rater. For 11 focal individuals, data from more than one rater was provided, ranging from 2 to 4 other-ratings. For multiple other-ratings of humility, the mean score was calculated, after controlling for interrater reliability.

Measures

Self-reported dispositional mindfulness was assessed with the Freiburg Mindfulness Inventory (FMI; Walach et al. 2006).

The FMI comprises 14 items covering the subcomponents presence (e.g., "I am open to the experience of the present moment") and acceptance (e.g., "In difficult situations, I can pause without immediately reacting"). The items were answered on a 6-point frequency scale (ranging from 1 = *never* to 6 = *almost always*). Cronbach's alpha was .92.

Self-reported noncalculative motivation to lead was tapped by using the German version of Chan and Drasgow's (2001) motivation to lead instrument developed by Felfe et al. (2012). A sample item was "I am only interested to lead a group if there are clear advantages for me" (all items of this scale are reverse scored). Items were rated on a 5-point scale (ranging from 1 = *strongly disagree* to 5 = *strongly agree*). Cronbach's alpha was .92.

Other-rated humility was measured with the instrument developed by Owens et al. (2013). This measure comprises the humility components of willingness to view oneself accurately (e.g., "This person actively seeks feedback, even if it is critical"), appreciation of others' strengths (e.g., "This person shows appreciation for the unique contributions of others"), and teachability (e.g., "This person is willing to learn from others"). Since no German version of this measure was available at that time, it was adapted for the use in German-speaking samples by using the standard method of back-translation. Again, a 5-point response scale (ranging from 1 = *strongly disagree* to 5 = *strongly agree*) was employed. Cronbach's alpha was .89.

Data Analyses

To examine whether the measures used in this study represented the theoretical constructs (i.e., mindfulness, humility, and noncalculative motivation to lead) appropriately, confirmatory factor analysis (CFA) with maximum likelihood (ML) estimation was conducted using the software AMOS (V.21). Given the small sample size, I used item parcels as indicators of latent constructs. For mindfulness, two parcels were created based on the preexisting dimensions, acceptance, and presence. The same procedure was applied for humility resulting in three parcels (i.e., willingness to view oneself accurately, appreciation of others' strengths, and teachability). By using a random algorithm (Matsunaga 2008), two parcels were formed for noncalculative motivation to lead. To test whether the aggregation of multiple other-ratings of humility was justified, within-group agreement (r_{wg}), intraclass correlations (ICC[1]), and the reliability of the means (ICC[2]) were assessed (LeBreton and Senter 2008). Next, the hypotheses of the present study were tested by using structural equation modeling (SEM) with ML estimation, using the software AMOS (V.21). Mindfulness was included as independent variable and other-reported humility as well as noncalculative motivation to lead as outcome variables in the regression model. Moreover, age, gender, and education were entered as

control variables. To verify the SEM results and to account for the nested structure of the data (i.e., other-ratings of humility nested in focal individuals), hierarchical linear modeling (HLM) with the software HLM7 was used to further examine whether self-reported dispositional mindfulness (level 2) predicts other-ratings of expressed humility (level 1). Again, I controlled for age, gender, and education; all variables were grand mean centered (except for gender) and fixed effects were estimated.

Results

Three theoretically viable measurement models were compared by means of CFA. In the first model, all item parcels were allowed to load on one factor, yielding a poor fit ($\chi^2 = 253.43$, $df = 15$, $p < .001$, $\chi^2/df = 16.89$, comparative fit index (CFI) = .52, root mean square error of approximation (RMSEA) = .39, standardized root mean square residual (SRMR) = .19). Next, the fit of a two-factor model treating mindfulness and humility as a single factor was tested. The fit statistics of this model were still poor ($\chi^2 = 165.98$, $df = 14$, $p < .001$, $\chi^2/df = 11.85$, CFI = .69, RMSEA = .32, SRMR = .17). Finally, a three-factor model with mindfulness, humility, and noncalculative motivation to lead as separate factors was tested. This model fit the data reasonable well ($\chi^2 = 24.63$, $df = 12$, $p < .05$, $\chi^2/df = 2.05$, CFI = .97, RMSEA = .10, SRMR = .05) and was preferable over the one-factor model ($\Delta\chi^2_{(3)} = 228.8$, $p < .001$) as well as the two-factor model ($\Delta\chi^2_{(2)} = 141.35$, $p < .001$). Hence, one can conclude that the measures used in this study represented valid tools for assessing the target constructs. Likewise, the pattern regarding inter-rater similarity of other-rated humility demonstrated that data aggregation was justified (LeBreton and Senter 2008). The average r_{wg} was .88 (Mdn = .93), the ICC(1) was .39 ($p < .001$), and the ICC(2) was .60. Considering that the number of other-ratings ranged from 2 to 4, an ICC (2) of .60 corresponds with Bliese's (1998) estimates about what can be statistically expected, given that the reliability of group means is strongly affected by group size.

Table 1 presents the descriptive statistics as well as intercorrelations among the variables included in the present analysis. As expected, mindfulness was positively correlated with expressed humility ($r = .61$, $p < .001$) and noncalculative motivation to lead ($r = .61$, $p < .001$). At the facet level, acceptance showed a higher correlation with noncalculative motivation to lead ($r = .64$, $p < .001$) than presence ($r = .41$, $p < .001$).

Figure 1 depicts the results of the SEM analysis. The obtained pattern provides support for hypothesis 1 in that dispositional mindfulness was positively related to other-rated humility ($\beta = .65$, SE = .07, $p < .001$). Furthermore, in line with hypothesis 2, mindfulness was a significant predictor of

noncalculative motivation to lead ($\beta = .69$, SE = .10, $p < .001$). The overall model fit was reasonable ($\chi^2 = 23.87$, $df = 11$, $p < .05$, $\chi^2/df = 2.17$, CFI = .97, RMSEA = .10, SRMR = .04), and hence, the data supported both hypotheses. In a subsequent SEM analysis, I controlled for age, gender, and educational level in the model. The pattern of results was the same as those I report above. Only, age predicted expressed humility ($\beta = -.18$, SE = .006, $p < .01$) and education was related to motivation to lead ($\beta = -.17$, SE = .04, $p < .05$). Moreover, the model fit ($\chi^2 = 101.06$, $df = 29$, $p < .001$, $\chi^2/df = 3.48$, CFI = .87, RMSEA = .15, SRMR = .13) was worse than that of the hypothesized model. These results suggest that sociodemographic factors did not confound the relationship between mindfulness and the outcome variables. Finally, the HLM results confirmed the pattern that has emerged from the SEM analysis, indicating a positive relationship between mindfulness and expressed humility with $\gamma = .49$ (SE = .06, $p < .01$), whereas the control variables did not have any significant effect.

Discussion

This study provides initial support that dispositional mindfulness is positively related to humility and a non ego-centered motivation when it comes to striving for or accepting a leadership position. For motivation to lead, a stronger correlation with the mindfulness facet of acceptance was found. A potential explanation for this pattern could be that an attitude of acceptance includes also accepting the responsibilities or costs of leadership to a higher degree. Both humility and a non ego-centered motivation to lead represent essential ingredients of servant leadership. However, the results of Study 1 lend no insight into the predictive value of mindfulness for actual servant leadership behavior. Thus, building upon this initial evidence, Study 2 aimed to fill in this gap.

Study 2

Study 2 was designed to test hypothesis 3, assuming a positive relationship between leader mindfulness and actual servant leadership behaviors.

Method

Participants

Matched data from 82 supervisors and 223 followers were included in the analysis. The leader respondents had diverse occupational backgrounds: 10 % worked in healthcare, 10 % in consulting, 6 % in public service, 23 % had an engineering

Table 1 Study 1 descriptive statistics and correlations

Variable	M	SD	1	2	3	4	5	6	7
1. Sex	–	–							
2. Age	–	–	.28**						
3. Education	–	–	.33**	.34***					
4. Mindfulness (index)	3.98	.94	.35***	.01	.24*				
5. Mindfulness (presence)	3.96	1.11	.15	−.03	−.01	.84***			
6. Mindfulness (acceptance)	4.00	.82	.41***	.03	.32*	.97***	.70***		
7. Humility (other-rated)	3.90	.74	.05	−.23*	.02	.61***	.55***	.57***	
8. Noncalculative motivation to lead	2.10	1.10	.20*	.10	.33**	.61***	.41***	.64***	.60***

Correlations were computed at the focal individual level ($N = 104$). Sex represents a dummy variable: 1 = female, 2 = male

***$p < .001$, **$p < .01$, *$p < .05$

or IT background, and 16 % worked in sales or marketing. The remaining 35 % had different backgrounds (e.g., tourism, education, law, transportation). Seventy percent of the leader respondents were male with a mean age of 46.9 years (SD = 9.25) and 14.3 years of leadership experience on average (SD = 9.8). With regard to follower demographics, 51 % of the respondents were male; the mean age was 38.7 years (SD = 11.4). They had an average organizational tenure of 11.3 years (SD = 10.8), and the average experience working with the leader was 4.2 years (SD = 6.3). Seventy-five percent of the employee respondents were employed full-time (25 % part-time).

Procedure

Starting from the professional network of the author of the present research, 141 leaders drawn from different industries in Germany were contacted. For the purpose of the empirical research, leaders were defined as persons holding a supervisory or management position. Eighty-four leaders agreed to participate in the study (response rate, 60 %) and were provided with an online questionnaire that assessed their mindfulness and personal information. Furthermore, they were asked to provide a list of their direct reports so that they could be

contacted. In sum, 281 followers were sent an online questionnaire assessing their immediate supervisor's servant leadership behavior and sociodemographics. All managers and followers were guaranteed confidentiality in a cover letter ensuring that no personal information would be reported to the company. Furthermore, it was explicitly communicated that the participation in the survey was voluntary and that employees were free to decide not to participate or to terminate their participation at any time without consequences.

Two leaders were eliminated due to missing data leaving an effective sample of 82 leaders. Out of the follower ratings, 223 could be matched with leader self-ratings. In order to match data, an anonymous identification code (assigned by the research team) was used. Of the 84 supervisors, 40 had only one team member rating of servant leadership. For 44 supervisors, ratings from multiple followers were obtained and the mean score was calculated, after controlling for inter-rater reliability. For team ratings, the average team size was 4.3 (SD = 3.0) with a range from two team members to 17 team members.

Measures

Leaders responded to the FMI (Walach et al. 2006). See "Study 1" for a more detailed description for this measure. Again, the items were answered on a 6-point frequency scale (1 = *never* to 6 = *almost always*). Cronbach's alpha was .92.

In order to measure how followers perceive the leadership style of their supervisors, the German version (Pircher Verdorfer and Peus 2014) of Van Dierendonck and Nuijten's (2011) Servant Leadership Survey (SLS) was employed. The SLS consists of 30 items covering eight dimensions of servant leadership. However, the present study focused only on the three dimensions representing the genuine servant-part of servant leadership, i.e., humility (e.g., "My manager learns from the different views and opinions of others," $\alpha = .88$)., standing
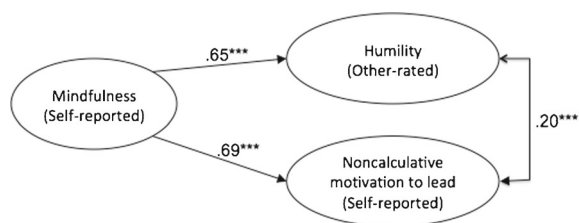
Note. ***$p < .001$

Fig. 1 The predictive role of mindfulness for other-rated humility and noncalculative motivation to lead

back (e.g., "My manager keeps himself/herself in the background and gives credits to others," $\alpha = .62$), and authenticity (e.g., "My manager is open about his/her limitations and weaknesses," $\alpha = .77$). The items were each anchored on a 6-point continuum (1 = *strongly disagree* to 6 = *strongly agree*).

At this point, it is helpful to note that Van Dierendonck and Nuijten's (2011) full model of servant leadership includes also the genuine "leader-part" of servant leadership which involves "enabling followers to express their talents by setting clear goals, providing a meaningful work environment, challenges and the necessary tools and conditions" (Van Dierendonck and Nuijten 2011, p. 261). In their model, this aspect is covered by the dimensions empowerment (i.e., giving followers a sense of personal power), accountability (i.e., holding followers accountable for performance), courage (i.e., risk-taking when appropriate and trying out new approaches to achieve goals), and stewardship (i.e., taking responsibility for the larger institution). Furthermore, a third factor in their model is forgiveness, which refers to positive and forgiving responses to employee wrongdoing. Although there might exist some arguable reasons to link leaders' mindfulness to these features, the respective theoretical underpinning seems rather vague. Therefore, I did not specify a proposition regarding the association between mindfulness and those genuine leader features of servant leadership and forgiveness, respectively. However, I used the full SLS, including the four dimensions pertaining to the genuine leader-part (i.e., empowerment, accountability, courage, and stewardship) as well as forgiveness for exploratory reasons.

Data Analyses

To ensure the successful operationalization of the servant leadership measure, a series of confirmatory factor analyses (CFA) in AMOS (V.21) was conducted, again using ML estimation. Due to the small size of the leader sample, it was not appropriate to conduct CFA for the mindfulness measure. However, given the rule of parsimony, mindfulness was treated as a holistic construct, covering the dimensions of presence and acceptance (Walach et al. 2006). As in Study 1, the viability of aggregating individual perceptions of servant leadership to the team level was examined by calculating r_{wg}, ICC(1), and ICC(2). Building on that, beside correlational analysis, hierarchical linear modeling with the software HLM 7 was used to further examine associations among leaders' dispositional mindfulness self-ratings and their followers' other-ratings of their servant leadership in nested data (follower ratings nested in their leaders). Leaders' self-ratings of dispositional mindfulness represented the predictor variable at the team level (level 2), whereas followers' ratings of servant leadership were outcome variables at the individual level (level 1). In the construction of the models, supervisor sociodemographics

(i.e., age, gender, and education) were entered as control variables. All variables were grand mean centered (except for gender), and fixed effects were estimated.

Results

With regard to the factorial validity of the SLS, the procedures applied by Van Dierendonck and Nuijten (2011) as well as Pircher Verdorfer and Peus (2014) were followed, finding a first-order model, in which factors were allowed to correlate, preferable over a second-order model in which factors were loading on a higher-order latent factor. This first-order model fit the empirical data with a chi-square of 664.37 ($p < .001$), $df = 375$, $\chi^2/df = 1.77$, CFI = .91, RMSEA = .06, and SRMR = .06. Although the model fit of the second-order factor was only marginally worse ($\chi^2 = 710.79$, $p < .001$, $df = 395$, $\chi^2/df = 1.799$, CFI = .90, RMSEA = .06, and SRMR = .07), the difference was statistically significant ($\Delta\chi^2 = 46.4$, $df = 20$, $p < .001$). Thus, the SLS captures separate but related dimensions representing different attributes of servant leadership.

For multiple follower ratings, results demonstrated moderate to strong inter-rater agreement (LeBreton and Senter 2008), indicating support for aggregation. For the overall servant-part, the average r_{wg} was .77 (Mdn = .87), the ICC(1) was .24 ($p < .001$), and the ICC(2) was .58. For the humility component, the average r_{wg} was .68 (Mdn = .77), the ICC(1) was .27 ($p < .001$), and the ICC(2) was .61. For the standing back component, the average r_{wg} was .69 (Mdn = .83), the ICC(1) was .24 ($p < .001$), and the ICC(2) was .57. For the authenticity component, the average r_{wg} was .63 (Mdn = .68), the ICC(1) was .19 ($p < .001$), and the ICC(2) was .49. In this study, 23 teams had two or three members and only two teams had more than 10 team members. Thus, ICC(2) values ranging from .49 to .61 correspond with Bliese's (1998) estimates about what can be statistically expected.

Next, the hypothesized relationship between leader mindfulness and perceived servant leadership behaviors was tested. Table 2 reports the descriptive statistics and inter-correlations of the study variables. Results revealed that leaders' mindfulness was positively related to standing back ($r = .26$, $p < .05$), humility ($r = .32$, $p < .01$), and authenticity ($r = .44$, $p < .001$) implying considerable support for hypothesis 3. At the facet level, acceptance and presence showed similar associations with the outcomes. Yet, for authenticity, acceptance held a stronger correlation ($r = .46$, $p < .001$). This makes sense since acceptance involves kindness toward oneself, reflected in FMI items such as "I see my mistakes and difficulties without judging them." On the other hand, leaders' authenticity, as measured by the SLS, covers items such as "My leader is open about his/her limitations and weaknesses."

The pattern revealed in the correlation analysis was supported by the HLM results. Specifically, leader mindfulness

Table 2 Study 2 descriptive statistics and correlations

Variable	M	SD	1	2	3	4	5	6	7	8
1. Sex	–	–								
2. Age	–	–	.30**							
3. Education	–	–	.22†	.16						
4. Mindfulness (index)	4.00	.83	−.04	.14	.13					
5. Mindfulness (presence)	4.10	.99	−.08	.08	.14	.93***				
6. Mindfulness (acceptance)	3.95	.79	.00	.17	.12	.97***	.82***			
7. Humility	4.22	.66	−.10	−.32**	.02	.32**	.30**	.31**		
8. Standing back	3.97	.72	−.11	.09	−.02	.26*	.21†	.27*	.50***	
9. Authenticity	3.60	.84	−.21†	−.16	.08	.44***	.36**	.46***	.56***	.33***

Correlations were computed at the supervisor level ($N = 82$). Sex represents a dummy variable: 1 = female, 2 = male

***$p < .001$. **$p < .01$. *$p < .05$. $^\dagger p < .10$

was positively associated with follower ratings of humility ($\gamma = .28$, SE = .08, $p < .01$), standing back ($\gamma = .19$, SE = .09, $p < .05$), and authenticity ($\gamma = .35$, SE = .10, $p < .001$). Regarding demographics, only age showed a small effect for humility ($\gamma = -.03$, SE = .01, $p < .01$) and authenticity ($\gamma = −.02$, SE = .01, $p < .05$), providing further support for hypothesis 3. For the sake of completeness, I report the results for the genuine leader-part of servant leadership (i.e., empowerment, courage, and stewardship) and forgiveness, too. The direction of the relationship between leaders' mindfulness and the dimensions empowerment ($r = .18$), courage ($r = .10$), and stewardship($r = .19$) was positive, except for accountability ($r = −.01$). For forgiveness, the correlation was $r = .06$. However, the correlations were not statistically significant. This pattern was fully confirmed in the HLM results as well.

Discussion

This study empirically examined the relationship between leaders' dispositional mindfulness and specific servant leadership behaviors, as perceived by their followers. As hypothesized, leaders' dispositional mindfulness predicted indicators of the genuine servant-part of servant leadership, i.e., humility, standing back, and authenticity. When looking at servant leadership, these features seem to represent the most proximal outcomes of mindfulness, given that mindfulness is inherently about seeing oneself more objectively and in context.

General Discussion

This paper set out to empirically examine whether dispositional mindfulness represents a predictor of humility, a non-self-centered motivation to lead, and ultimately genuine servant leadership behaviors. In Study 1, it was hypothesized that dispositional mindfulness would trigger the capacity to take a detached view of one's beliefs, thoughts, and emotions and thus enable people to gain a more accurate perception of their weaknesses and strengths and keeping both in perspective. This was tested by assessing the effect of dispositional mindfulness on other-rated humility, revealing full support for the prediction. Furthermore, it was investigated whether dispositional mindfulness is related to a more humble attitude when it comes to striving for or accepting a leadership position. Consistent with the theoretical expectation, data showed that dispositional mindfulness was negatively associated with a purely self-centered motivation to lead where a leadership position is primarily used for one's own advantage. In summary, these results suggest that dispositional mindfulness can reduce egocentric tendencies in individuals and thus may represent an important prerequisite for humble and other-oriented leadership behavior. I tested this assumption in Study 2 by drawing upon followers' ratings of leaders and found leaders' dispositional mindfulness to be significantly related to genuine servant leadership behaviors, specifically humility, standing back, and authenticity.

With regard to theoretical and practical implications, this is the first research in the field of leadership to establish linkages between dispositional mindfulness, humility, motivation to lead, as well as specific servant leadership behaviors. The findings are fully in line with the central tenets of previous mindfulness research as well as self-determination theory positioning that mindful individuals are more able to put their talents, strengths, and accomplishments in a proper perspective. Results suggest that dispositional mindfulness can help individuals to shift towards a less ego-centered perspective (Shapiro et al. 2006) and fosters feelings of secure, noncontingent self-worth, thus buffering against excessive self-

protection or self-promotion (Heppner and Kernis 2007). Regarding servant leadership, having a stable and secure self-concept can be seen as key to distinguish a true servant attitude from servility, where others could even take advantage of the servant leaders' kindness as weakness (Van Dierendonck 2011). Rather, recent research indicates that leader humility and the ability to stand back foster employees' loyalty and trust in the leader and thus can even increase the impact of genuine leadership behaviors such as empowering followers and holding them accountable for performance (Sousa and Van Dierendonck 2015). This is in line with results reported by Yoshida et al. (2014). In their study, servant leadership promoted individual identification with the leader, which in turn was positively related to follower creativity and team innovation. As such, mindfulness can help leaders to free themselves from what Ancona et al. (2007) refers to as the "myth of the complete leader," the person at the top having all the answers. Rather, by knowing one's unique set of strengths and weaknesses and by helping followers to grow and succeed, servant leaders seem particularly suitable to create an environment "that lets people complement one another's strengths and offset one another's weaknesses" (Ancona et al. 2007, p. 100).

From a genuine servant leadership research perspective, leader mindfulness seems particularly relevant since current research focuses on dispositional mindfulness as well as mindfulness as a trainable skill. This echoes the call of Liden et al. 2014a (p. 373) stating that research on potential antecedents of servant leadership "should examine a broad set of predictors including those that might be personality-based (nature) as well as those that may be more malleable (nurture)." In line with this, I argue that a highly relevant implication of the findings of the present research refers to servant leadership development. In fact, whereas several characteristics of effective leadership such as empowerment, inspiring, and communication are learnable skills, genuine servant leadership characteristics appear to be more difficult to develop. It seems plausible that humility, standing back, and authenticity, by their nature, come more naturally to some people than to others. Here, mindfulness may open up a viable route to personal development. Two theoretical frameworks seem particularly useful for substantiating the role of mindfulness in servant leadership development. First, I build on constructive-developmental theory, which explains effective leader development as an ongoing process in which a leader's understanding of self and the world becomes more elaborated and complex over time, ultimately reflected in qualitatively distinct stages of growth (McCauley et al. 2006). This reflects the perspective provided by Shapiro et al. (2006, p. 6), emphasizing that the cultivation of mindfulness is a continuation of the naturally occurring human developmental process whereby individuals become gradually more objective about their internal experience. Therefore, mindfulness is expected to be

particularly effective in fostering higher-order development where "the individual takes his or her unique identity itself as an object of reflection" and thus "self-exploration and ongoing development of self and others is a central concern" (McCauley et al. 2006, p. 638). The second approach is self-directed leadership development (SDLD; Nesbit 2012), which highlights three basic metaskills of leaders' self-development, (1) managing emotional reactions to feedback, (2) self-regulation, and (3) self-reflective practice, which are all clearly related to mindfulness. In summary, given the abundant evidence that mindfulness can be enhanced by both formal and informal mindfulness trainings (Carmody and Baer 2008; Davis and Hayes 2011), leadership development in general and servant leadership development in particular can strongly benefit from including such interventions. However, whereas the market for mindfulness trainings in the field of leadership development is growing, properly conducted scientific studies on the effects of such interventions are still lacking.

Limitations and Future Research

As with any field research project, the present research is not without limitations. Most notably, all interpretations of causality are based on the evidence of covariation and confidence in the theoretical connections proposed, offering considerable support but of course not genuine proof for the hypothesized effects. Also, not all variables were tested in a leader sample. Although using different samples enhances confidence in the generalizability of the link between mindfulness and a humble attitude, it was not possible to shed light on the specific motives of actual leaders. Thus, future research should not only try to replicate the findings revealed herein but would benefit from investigating the effects of leaders' mindfulness on specific servant leadership motives, attitudes, and behaviors in more detail. For instance, future research should investigate how mindfulness interacts with leaders' genuine motivation to serve (Ng and Koh 2010), as Reb et al. (2015b) speculated that mindfulness may not necessarily lead to a servant attitude but could be useful for those who want to be a servant leader. Furthermore, the present research made no propositions for the genuine leader side of servant leadership (i.e., accountability, empowerment, courage, stewardship) and the forgiveness component and the explorative analysis revealed no significant associations between leader mindfulness and these dimensions. A potential explanation for this pattern is that mindfulness, via the attenuation of narcissism and experiential avoidance in leaders, may translate more directly to humble and authentic behaviors. In contrast, other leadership responsibilities such as giving direction and providing a meaningful and challenging work environment are more contingent on organizational context. Moreover, they may represent more distal outcomes of mindfulness. This may be the case for forgiving behaviors as well since a constant stance of

acceptance and equanimity is generally seen as a long-term effect of mindfulness (Shapiro et al. 2006). Against this background, future research should more thoroughly examine the proportion of direct and indirect effects of leader mindfulness on distinct servant leadership behaviors. This should ideally include longitudinal field experiments because it takes time for mindfulness to translate into actual leadership behavior in real settings. Such studies can also benefit from the fact that essential outcomes of mindfulness in terms of cognitive, emotional, and behavioral flexibility (Shapiro et al. 2006) appear among the most recently discussed antecedents of servant leadership (Liden et al. 2014a; Van Dierendonck 2011). For instance, it would be useful to examine the mediating role of concrete indicators of self-determination such as core self-evaluations (Judge and Bono 2001). Moreover, further mediating processes may refer to cognitive complexity (Bieri 1955), emotional intelligence (George 2000), as well as moral maturity and moral conation (Hannah et al. 2011).

A major difficulty with the design used in the present research is to obtain matchable data (i.e., self-reports and other-ratings). This explains the relatively small sample sizes in both studies, which resulted from balancing pragmatic considerations with statistical rules of thumb for appropriate sample sizes (Maas and Hox 2005; VanVoorhis and Morgan 2007). Moreover, when matched data are used, the role of selection effects needs to be considered. Thus, future studies should control for relationship quality and respondents' implicit beliefs about leadership (Hansbrough et al. 2015).

A final concern refers to the measure used for capturing dispositional mindfulness. Recently, the FMI has been criticized based on its strong roots in Buddhist psychology. In fact, some items may be difficult to understand for respondents unfamiliar with the concept of mindfulness (Bergomi et al. 2013). Thus, future work on the role of mindfulness for leadership would benefit from using alternative measures such as the "Comprehensive Inventory of Mindfulness Experiences" (CHIME, Bergomi et al. 2014). The CHIME integrates existing mindfulness conceptualizations and measures and thus allows a more fine-grained assessment covering several subcomponents of mindfulness.

Compliance with Ethical Standards The author certifies that the research presented in this manuscript has been conducted within the DGPs (German Psychological Society) ethical standards regarding research with human participants and scientific integrity.

Conflict of Interest The author declares that there are no conflicts of interest.

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