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Bradley P. Owens, Michael D. Johnson, Terence R. Mitchell

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Expressed Humility in Organizations: Implications for Performance, Teams, and Leadership

Bradley P. Owens

The State University of New York at Buffalo, Buffalo, New York 14260, bpowens@buffalo.edu

Michael D. Johnson, Terence R. Mitchell

University of Washington, Seattle, Washington 98195 {mdj3@uw.edu, trm@uw.edu}

We first review several literatures to define the construct of expressed humility, discuss its implications in social interactions, and distinguish expressed humility from related constructs. Using five different samples, Study 1 develops and validates an observer-report measure of expressed humility. Study 2 examines the strength of expressed humility predictions of individual performance and contextual performance (i.e., quality of team member contribution) relative to conscientiousness, global self-efficacy, and general mental ability. This study also reveals that with regard to individual performance, expressed humility may compensate for lower general mental ability. Study 3 reports insights from a large field sample that examines the relationship between leader-expressed humility and employee retention as mediated by job satisfaction and employee engagement as mediated by team learning orientation. We conclude with recommendations for future research.

Key words: humility; task performance; leadership; turnover; self-awareness; narcissism; general mental ability;

learning goal orientation; construct validation; theory elaboration *History*: Published online in *Articles in Advance* February 12, 2013.

Introduction

The construct of humility has received increasing attention in organizational scholarship in recent years. In the wake of recent corporate scandals that have been attributed to the unbridled ego, hubris, sense of entitlement, and self-importance of the corporate executives involved (Boje et al. 2004), virtues such as humility have been viewed with greater interest and are seen as more essential to the character of those who lead and work within organizations. Humility has been included as one of the core "organizational virtues" that are proposed to provide the moral foundation of organizational environments (Cameron et al. 2003). Theorists have proposed that humility is becoming more critical for leaders who direct their organizations in increasingly dynamic and turbulent environments (Morris et al. 2005, Vera and Rodriguez-Lopez 2004). Weick (2001, p. 93) suggested, for instance, that the increasing "unpredictability and unknowability" organizations face will require leaders of the 21st century to have "more humility and less hubris."

Despite calls for leaders and organization members to have more humility, there are large gaps in our understanding of what "humility" means. Some view humility as a multifaceted, adaptive strength (Tangney 2000), whereas others associate humility with humiliation and lowliness (see study results of Exline and Geyer 2004).

Many definitions have been suggested, but little conceptual consensus has emerged. Moreover, no empirical research that we are aware of has measured the impact of humility on important organizational outcomes. Consequently, there are many propositions suggesting the importance of humility within organizations (i.e., Collins 2005, Morris et al. 2005, Owens and Hekman 2012, Vera and Rodriguez-Lopez 2004), but almost nothing has been confirmed by empirical study. Given these measurement problems and the interpersonal, interactional nature of organizational life, we focus our definition on the expressed behaviors that demonstrate humility and how the behaviors are perceived by others.

To further the study of expressed humility in organizational contexts we have three major goals. First, we seek to define the construct in a way that integrates previous work but goes beyond in a variety of ways by (1) systematically synthesizing the existing literature into a parsimonious definition of expressed humility, (2) conceptually fitting expressed humility within the nomological network of related constructs, and (3) emphasizing how the expressed aspects of humility could influence important organizational behaviors. Our second goal is to develop a measure of expressed humility by following the standard procedures suggested by Hinkin (1995). Our third goal is to demonstrate the



usefulness of expressed humility, especially as expressed by a leader in the organizational context.

Defining Expressed Humility

The general construct of humility has a rich background in theology and philosophy. Because humility often entails the recognition and appreciation of knowledge and guidance beyond the self, it is a foundational principle in all major world religions—Buddhism, Christianity, Hinduism, Islam, etc. Humility is also central to many philosophical discussions of morality. Immanuel Kant, for example, viewed humility as a "meta-attitude which constitutes the moral agent's proper perspective on himself" and a virtue foundational to most other virtues (Grenberg 2005, p. 133). Humility in general has been categorized as a temperance virtue that guards against excess (Park and Peterson 2003).

Although the virtue of humility has rich historical roots, conceptualizations of humility vary significantly across philosophical, theological, and psychological perspectives. These differing conceptualizations have made it difficult to derive consensus about the definition of humility. Furthermore, attempts to assimilate different conceptualizations of humility from these fields has led to complex definitions that, in some cases, contain up to 13 different dimensions (Vera and Rodriguez-Lopez 2004), making humility an unwieldy construct to operationalize.

One possible reason why previous definitions of humility are so complex is that humility may have different forms or types. Some components of past humility definitions have a clear intrapersonal, internal, and personal focus (i.e., balanced processing of personal strengths and weaknesses; see Owens 2011); other definitions capture the manifested, external, expressed, or interpersonal properties of humility (i.e., displaying a penchant to seek to learn from others; see Vera and Rodriguez-Lopez 2004). Given the conceptual and operational implications for these differences, it is not surprising that past definitions of humility have been confusing and past attempts to measure humility unsuccessful. Because our purpose is to examine humility in the context of organizations, which is considered to generally be a rich social context, we focus our attention on the expressed, interpersonal nature of humility.

Literature Review and Definition

A review of the current literature was our first step in developing a definition of expressed humility. We used three criteria in selecting articles for this analysis. Specifically, we included articles (1) written within the last 10 years, (2) whose main intent was to define the humility construct, and (3) from psychological or organizational behavior journals or book chapters. Given our interest in the interpersonal and behavioral aspects

of humility, we looked specifically for examples of humility that would be externally observable by others (i.e., behavioral based) and did not consider more intrapersonal aspects of humility (i.e., cognitions and emotions). The first author and two other academic researchers carefully reviewed this literature independently and made notes on what emerged as the core dimensions of expressed humility. We then met to discuss the components of humility and to present our summaries of the components of expressed humility. After some discussion, we agreed on three general categories of behavior that underlie the construct. We converged on three dimensions because with more categories, there was redundancy across categories, and with fewer categories, some key aspects of expressed humility were obscured.

As a result of our independent analysis of the literature and the previous definitions of humility (i.e., Morris et al. 2005, Exline et al. 2004, Tangney 2002, Templeton 1997, Means et al. 1990), we define expressed humility as an interpersonal characteristic that emerges in social contexts that connotes (a) a manifested willingness to view oneself accurately, (b) a displayed appreciation of others' strengths and contributions, and (c) teachability. We view these components as the core reflective indicators of humility (Bollen and Lennox 1991) and see them as tightly interrelated. Expressed humility comprises a pattern of behaviors that occur in interpersonal interactions and is therefore observable by others. We propose that though individuals may have a baseline penchant for expressing humility that is based on heredity, socialization, and life experience, the expression of a person's humility may vary according to contextual cues and circumstances (Mischel and Shoda 1995). We elaborate on each component of our definition of expressed humility below. Though our construct focuses on external, observable behaviors that can be perceived by others, we discuss general insights from the humility literature about the motives and cognitions that are thought to undergird the behavioral manifestations of humility.

An Interpersonal Characteristic

Similar to Costa and McCrae's (1992) conceptualization of extraversion and agreeableness as personal, individual dispositions that are manifest on the "interpersonal plane," expressed humility represents an individual characteristic that emerges in social interactions, is behavior based, and is recognizable to others. For decades, the term "interpersonal traits" has been used to conceptualize individual differences that shape interpersonal interactions (Sullivan 1953, Bales 1950, Foa and Foa 1974, Wiggins 1979) and have been effectively assessed through peer ratings (Costa and McCrae 1992). Though all personality traits have some interpersonal implications—and indeed, the Big Five was originally based on an analysis of social (peer-reported) ratings



(McCrae and Costa 1989)—some individual differences implicate interpersonal dynamics more than others. Like extraversion and agreeableness, we conceptualize expressed humility as a construct that has significant interpersonal implications. Because humility is usually a label attached by others—not something that an individual assesses and asserts as part of his or her own selfview—we view conceptualizing and operationalizing an expressed or social form of humility as a meaningful and effective way to begin studying this historically elusive construct. We differentiate our social conceptualization of humility from the more intrapersonal, philosophical approaches to humility (e.g., self-transcendence, appreciation of how all things are connected and contribute to our cohesive universe; see Tangney 2002, Roberts and Wood 2003), which have more intracognitive implications. Our social view of humility matches our purpose to help us further understand how humility plays out in organizational contexts.

We propose that expressed humility reflects a person's tendency to approach interpersonal interactions with a strong motive for learning through others. Interaction "pushes us to constantly collect information about ourselves and our environment" (Lawrence and Nohria 2002, p. 107), and therefore expressed humility is primed, catalyzed, and reinforced through interactions with others. In addition, humble people utilize interactional partners as "social mirrors" through which they can more accurately see (or gain an accurate reflection of) themselves by being transparent about strengths and limitations. And finally, humble people see interaction partners as key sources of learning and insights about personal development. Given its relational nature, expressed humility will be especially relevant in contexts that entail frequent interactions with people and where the content of the interactions is to exchange information, feedback, and criticism (such as in leaderfollower dyads).

Manifested Willingness to See the Self Accurately

The first component of our definition of expressed humility captures a desire to engage in an ongoing process of achieving accurate self-awareness through interactions with others. Nielsen et al. (2010) suggested that "people with humility are actively engaged in utilizing information gathered in interactions with others, not only to make sense of, but also, when necessary, to modify the self. That is, their self-views are focused on their interdependence with others rather than their independence from others" (pp. 34-35). We propose that humility fosters a more objective appraisal of personal strengths and limitations that is manifested by transparent disclosure of personal limits, acknowledging mistakes, and seeking realistic feedback about the self. From a general psychological standpoint, longitudinal research has shown that individuals who maintain more realistic

self-views tend to be more psychologically healthy and have higher general well-being (Vaillant 1992). In contrast, individuals with self-enhancing and inaccurately positive self-perceptions (which are often measured by contrasting self-views with those of observers) are more likely to be maladjusted over the long term (Ungerer et al. 1997), be more deceitful, have a more brittle egodefense system, have less social poise and presence, and be less productive (Colvin et al. 1995).

In an organizational context, these behaviors imply that this component of the expressed humility construct may have implications for the quality of interpersonal work relationships, decision making, and subsequent performance. We propose that employees who engage in this self-learning through interactions with others gain a more accurate awareness of their own intrapersonal resources and will be less prone to overconfidence, which is the root of a myriad of organizational problems, poor decisions, and self-complacency (McIntyre and Salas 1995, Vera and Rodriguez-Lopez 2004).

Obviously, this overconfidence is especially dangerous in those who hold power in organizations, such as those in leadership roles. A balanced or more accurate self-awareness helps organizational members and leaders more accurately know when to take action and when to learn more about an issue, as well as which endeavors they are capable of handling competently and which should not be attempted because of incompetence or inexperience. Furthermore, as past research has shown that self-disclosure often leads to increased trust, relational satisfaction, and reciprocal disclosure (Ehrlich and Graeven 1971, Collins and Miller 1994), we believe that this dimension of expressed humility, manifested by disclosure of personal limitations and weaknesses, has the potential to foster higher-quality and more transparent interpersonal interactions between leaders, followers, and peers.

Appreciation of Others' Strengths and Contributions

According to Means et al. (1990, p. 214), "Humility is an increase in the valuation of others and not a decrease in the valuation of self." Expressed humility reflects attitudes that are other-enhancing rather than self-enhancing (Morris et al. 2005) and leads one to acknowledge and show that he values others' strengths (Tangney 2002). Humility allows one to transcend the comparative-competitive response when interacting with others and instead acknowledge and admire the strengths and contributions of others without feeling threatened by them (Exline et al. 2004). In line with this reasoning, King and Hicks (2007, p. 632) suggested that "true humility is more about possessing an exalted view of the capacities of others rather than a negative view of oneself." Expressed humility entails the behavioral manifestation of this positive view of others.



From an organizational perspective, research has found that when individuals are given power they tend to devalue the worth and contributions of others (Kipnis 1972). We propose that organizational leaders and members who possess humility can transcend this tendency and instead maintain a genuine appreciation and high valuation of the efforts, strengths, and abilities of their coworkers. This is not to say that individuals with humility will be oblivious to their coworkers' weaknesses and areas of incompetence, but rather, they will be able to more readily identify and value the unique abilities and strengths of those with whom they work. By attending to the qualities of others, humble organizational members will more likely hold a nonheuristical, complex view of others (i.e., viewing others through a multifaceted lens that sees a variety of character strengths and skill sets others possess) and less likely to hold simplistic, dualistic evaluations of others (i.e., competent versus incompetent). By so doing, humble leaders and members are more readily able to identify in others valuable resources for social modeling and learning.

Teachability

The third main component of expressed humility is teachability, which is manifested by showing openness to learning, feedback, and new ideas from others. Tangney (2000, p. 72) argued that "humility carries with it an open-mindedness, a willingness to...seek advice, and a desire to learn." Similarly, Templeton (1997, p. 162) noted, "Inherent in humility resides an open and receptive mind...it leaves us more open to learn from others." We propose that this aspect of expressed humility reflects a person's absorptive capacity (see Zahra and George 2002) on an individual level and may be generally related to developmental readiness, a concept that has mainly been applied to leaders (Avolio et al. 2009) within the context of interpersonal interactions. This aspect of expressed humility would be manifest by a displayed receptiveness to others' feedback, ideas, and advice and the willingness to ask for help.

The ability of organizational members to learn effectively is critical for organizations competing in the present "knowledge economy" (Dane and Pratt 2007). The rapid advance of technology and increasing specialization of work suggest that organizations are in greater need of leaders and employees who are teachable and have a desire and willingness to acquire new skills, absorb new information, and learn from others. Humble individuals, through showing teachability, afford others a sense of voice, which has been shown to foster greater trust, motivation, and a heightened sense of justice (Cropanzano et al. 2007). Teachability may also be a particularly important component of expressed humility in leadership contexts. Alexander and Wilson (in Church et al. 1998) argued that a thirst for learning is one of the most critical capacities of effective leaders. Tichy and Cohen (1997) also insisted on the importance of leaders having a "teachable point of view." Finally, Weick (2001, p. 110) stated that when a leader is able to humbly admit, "I don't know," "that admission forces the leader to drop pretense, drop omniscience, drop expert authority, drop a macho posture, and drop monologues.... [L]istening and exploring is the consequence."

Expressed Humility in the Nomological Network

In the exploration of a new construct, it is important to explain where it fits within the nomological network and its unique conceptual space (Schwab 1980, Hinkin 1995). Expressed humility is related to but distinct from many existing constructs. From our review of the literature, it seems most important to differentiate expressed humility from the existing constructs of modesty, narcissism, openness to experience, honesty-humility, learning goal orientation (LGO), and core self-evaluation (CSE). Table 1 summarizes what we view as the conceptual differences between these constructs and the dimensions of expressed humility.

Although we do not need to go over each of the variables in the table, we summarize by saying that in every comparison with expressed humility, the other constructs demonstrate either criterion deficiencies or criterion contamination. That is, the related constructs either fail to capture the complete expressed humility construct space or contain aspects of their construct that are not part of the expressed humility space, and in some instances, both problems occur. For instance, that modesty does not include a learning orientation, antinarcissism does not capture teachability, and openness does not include selfevaluative information are all examples of criterion deficiency. Criterion contamination examples would include learning goal orientation targeting achievement situations and core self-evaluations having optimistic selfviews instead of accurate ones.

Measuring Expressed Humility

As previously mentioned, most of the work discussing humility in organizations has been theoretical, and thus, to test these theories, a reliable and valid measure of humility must be developed. In line with the concept of expressed humility, we developed a measure that reflects the perceptions of humble behavior expressed by a focal person. Here is why: First, initial attempts to measure humility have questionable face and construct validity. Past attempts to circumvent problems associated with measuring humility (e.g., having people accurately self-report their strengths and weaknesses or describing themselves as humble) have used a variety of proxies aimed at indirectly representing the humility construct. Some have tried to avoid the problems inherent in measuring humility via self-report by simply operationalizing humility as low self-esteem (Knight and Nadel 1986). Others have discussed the possibility of measuring humility by comparing the difference between self-report and other-report performance evaluations (Tangney 2000).



Table 1 Expressed Humility in the Nomological Network

Constructs	Definition	Key differences from expressed humility
Modesty	Not boastful, underselling accomplishments, lacking assertiveness. Withhold positive information about the self (Baumeister and Jones 1978); deferring credit for success (Hareli and Weiner 2000).	Modesty differs from expressed humility in that modesty has less to do with the motivation for personal learning and personal development and more to do with having the social sensitivity not to draw too much attention to, talk too much about, or boast about oneself.
Narcissism	"A personality trait encompassing grandiosity, arrogance, self-absorption, entitlement, fragile self-esteem, and hostility" (Rosenthal and Pittinsky 2006, p. 617).	Expressed humility is not merely a lack of displayed grandiosity or self-absorption (as we would expect from low levels of narcissism), but it also addresses teachability or appreciation of others, dimensions that are not directly addressed by narcissism. Expressed humility also is theorized to be associated with a stable or tempered self-view that does not overinflate with praise or overdeflate with criticism; narcissism refers to stark oscillations from grandiose to dejected self-views.
Openness to experience	Describes the extent to which someone is imaginative and insightful; has a broad range of interests; is in tune with inner feelings; and appreciates art, emotion, novelty, unusual ideas, and adventure (Barrick and Mount 1991, McCrae and Costa 1987).	Expressed humility focuses on being open to feedback and ideas from others (and thus is more of an interpersonal construct) and captures one's approach to <i>self-evaluative</i> information, whereas openness to experience has very little to do with self-evaluative information and is not necessarily an interpersonal construct (it entails a general mental openness to information and experience that is not necessarily tied to interactions with others), and thus we expect expressed humility to be more tied to relational outcomes in organizations compared with openness to experience.
Honesty-humility	Part of the HEXACO personality model (Ashton and Lee 2008), encompassing the subcomponents of sincerity, fairness, greed avoidance, and modesty.	Honesty-humility includes some important prosocial characteristics that are likely to be related to the expressed humility construct but does not capture the core elements of willingness to view oneself accurately, teachability, and appreciation of others.
Learning goal orientation	An adaptive approach to task situations associated with the motivation to understand and master the task rather than to display or prove competence (Dweck 2000).	Learning goal orientation describes cognitive and behavioral response patterns in achievement situations, whereas expressed humility is manifest in a broad range of social situations that may or may not have direct achievement implications. LGO reflects a desire (i.e., an internal motivation or cognition) to develop new competencies, master new situations, and acquire new skills; expressed humility reflects behaviors that reflect a pursuit of accurate self-awareness and appreciation of others' strengths, in addition to learning and development.
Core self-evaluation	A higher-order trait that represents a baseline or comprehensive view of the self and comprises the four lower-order constructs of self-esteem, generalized self-efficacy, internal locus of control, and emotional stability (Judge et al. 2003).	Generalized self-efficacy reflects optimistic self-beliefs, whereas expressed humility reflects a motivation for an accurate self-view. Expressed humility and internal locus of control also share theoretical roots with regard to determinism, as humility allows individuals to believe they can improve their personal weaknesses. However, internal locus of control focuses more on beliefs about what happens to us externally, whereas expressed humility is more focused on issues dealing with personal development. Practically speaking, core self-evaluation is important for motivation and persistence (locus of control, self-efficacy) and consistency in performance (emotional stability), but it says little with regard to how viewing others may influence workplace performance via social learning, nor whether such self-views are an accurate portrayal of self-abilities (i.e., hyper-CSE has been suggested as a proxy for hubris; see Hiller and Hambrick 2005).



Second, in addition to using existing scales as proxies for humility, others have tried to develop self-report measures of humility. Attempting to circumvent the social desirability bias of measuring humility via selfreporting, Emmons (as reported in Tangney 2002) created a scale using a forced-choice format. However, results from the initial scale development analysis showed prohibitively low internal consistency. Part of the reason for this is that serious problems exist conceptually with assessing humility via self-report. For people to consider themselves exceptionally humble seems paradoxical to the construct. Because of these problems, several scholars have suggested that assessing humility through close observers may be the ideal approach (Exline et al. 2004, Davis et al. 2010). For instance, Richards (1992) argued that although those who actually possess humility are not likely to attribute this virtue to themselves, close others may be able to observe and report on this virtue. Observer reports of personality have been shown to have a high degree of consensus (John and Robins 1993, Kenny 1994) and a high level of accuracy (agreement with self-reports), even when exposure to the person rated is brief or indirect (Gosling et al. 2002). We report on our efforts to develop an observerreport measure of expressed humility below.

Study 1: Developing a Measure of Expressed Humility Method

Participants and Procedures. Five samples were used to develop and validate items for a new expressed humility scale. Samples A, B, and C consisted of undergraduate students from a large northwestern U.S. university. Sample D consisted of employees of a large U.S. health services organization, and Sample E consisted of full-time employees from a commercial subject pool. Details regarding each of these samples and the purpose(s) for using each sample are provided in Table 2.

Instrument Development. Based on our definition of expressed humility, we generated items that were screened to ensure they were content valid, clear, and concise. This process resulted in an initial list of 32 items, and our sample sizes allowed for at least a 5:1 subject to item ratio. Items were scaled using a Likert format ranging from "strongly disagree" to "strongly agree." In Samples A and B, participants were asked to type the initials of an individual they knew very well on the survey and then to assess this person on the expressed humility items. Sample C participants were asked to rate members of their student project teams, and Samples D and E participants were asked to rate their immediate supervisors.

To further establish construct validity, we administered to Samples A and E scales measuring constructs that are expected to be related (for nomological validity) and unrelated (for discriminant validity) to the expressed humility construct. Specifically, the Sample A survey included openness, conscientiousness, emotional stability, extroversion (Barrick and Mount 1991), modesty (Peterson and Seligman 2004), narcissism (Margolis and Thomas 1980), and core selfevaluations (Judge et al. 2003). The Sample E survey included the measures of honesty-humility (Ashton and Lee 2008) and learning goal orientation (VanDeWalle 1997). Similar to the expressed humility scale, items representing the Big Five, modesty, narcissism, and core self-evaluations were adjusted to match an observerreport format (i.e., "this person" was used in each descriptive statement), because previous research has shown the other-report approach to rating personality is not only valid but often more accurate than self-report measures (see Kolar et al. 1996).

Results

Instrument Analysis. We conducted exploratory factor analyses using data from Sample A for the expressed

Table 2 Characteristics of the Study 1 Samples

		,					
Sample	Source	Ν	Gender	Average age	Ethnicity	Work experience	Analysis
A	Upper-level undergraduate business students	164	52% male	21	50% Caucasian	N/A	Exploratory factor analysis, discriminant validity
В	Upper-level undergraduate business students	236	49% male	22	59% Caucasian	2.8 years	Confirmatory factor analysis
С	Upper-level undergraduate business students	124	52% male	22	50% Caucasian	3.3 years	Test-retest reliability
D	Employees of a large health maintenance organization	511	63% male	48	79% Caucasian	4.7 years (organization tenure)	Confirmatory factor analysis
E	Full-time employees in a commercial subject pool	263	37% male	39	79% Caucasian	13.2 years	Discriminant validity



Table 3 Expressed Humility Scale Descriptive Statistics, Loadings, and Reliability

Scale item	Item mean	Item SD	Factor loadings	Alpha if item deleted
This person actively seeks feedback, even if it is critical.	2.80	1.15	0.74	0.94
This person admits it when they don't know how to do something.	3.20	1.12	0.85	0.93
This person acknowledges when others have more knowledge and skills than him- or herself.	3.28	1.07	0.80	0.94
4. This person takes notice of others' strengths.	3.37	1.00	0.80	0.94
5. This person often compliments others on their strengths.	3.05	1.01	0.74	0.94
This person shows appreciation for the unique contributions of others.	3.19	1.00	0.79	0.94
7. This person is willing to learn from others.	3.39	1.06	0.83	0.93
8. This person is open to the ideas of others.	3.29	1.03	0.83	0.93
9. This person is open to the advice of others.	3.35	1.08	0.88	0.93

humility scales. Through an iterative process, we sequentially removed items with factor loadings below 0.20 or cross loadings above 0.40. This process resulted in a nine-item, three-factor solution. Scale items, factor loadings, item means, and standard deviations are presented in Table 3. The reliability for the resulting expressed humility scales was $\alpha = 0.94$. Items representing the expressed humility components of willingness to view oneself accurately (items 1, 2, and 3), appreciation of others' strengths (items 4, 5, and 6), and teachability (items 7, 8, and 9) were retained in the refined scale, suggesting a three-factor structure. As a face validity test, we followed the guidelines in previous studies to conduct a sorting task (Anderson and Gerbing 1991). We recruited 10 content experts (i.e., professors and researchers who have been involved with research on humility) to sort these nine items along the three subdimensions of expressed humility, and, as a foil, we included nine items from the modesty scale (Peterson and Seligman 2004) and nine items from a Machiavellian scale (Jackson Personality Inventory; see Jackson 1977). After we provided a definition for each construct, participants were asked to assign each item to one of the construct categories according to their respective construct definitions. In all these codings, there was only one instance where an expressed humility item was coded as belonging to the modesty construct and only two instances where a modesty item was coded as belonging to the expressed humility construct. There were no other cross-categorizations across constructs. We viewed this as strong evidence for the face validity of the expressed humility items and the underlying dimensions.

Using data from Sample B, we conducted a confirmatory factor analysis to test the factor structure of the nine-item expressed humility scale. Two competing a priori models were tested: a one-factor solution and a three-factor solution with the three subcomponents loading onto a second-order general expressed humility factor. Following the guidelines outlined by Kline (1998,

p. 130) we report four tests of fit: chi-squared, goodness of fit (GFI), nonnormed fit index (NNFI), and standardized root mean squared residual (SRMR). The one-factor model had a chi-square value of 1406.05 (p < 0.001; df = 27), a GFI of 0.77, an NNFI of 0.92, and an SRMR of 0.05, suggesting moderate fit. In contrast, the three-factor model loading onto a second-order factor had much better fit, with a chi-square value of 410.47 (p < 0.001; df = 24), a GFI of 0.93, an NNFI of 0.97, and an SRMR of 0.03. These data support our conceptualization that expressed humility is reflected by three underlying, interconnected components. In other words, our expressed humility measure is a reflective measure that captures three manifest indicators of the latent expressed humility construct (see Edwards and Bagozzi 2000).

The nine-item expressed humility scale was administered to a third sample, Sample C, to analyze the reliability of the scales over time. The expressed humility scores from Time 1 and Time 2 (approximately one month later) were related (r = 0.56, p < 0.001), indicating evidence of test-retest reliability. The expressed humility scale was then administered to Sample D to replicate this factor structure with a field sample. Similar to the procedure conducted with Sample B, we tested a one-factor solution and three-factor solution loading onto a higher-order factor. The one-factor model again achieved moderate fit, with a chi-square value of 619.47 (p < 0.001; df = 27), a GFI of 0.77, an NNFI of 0.82, and an SRMR of 0.06. In contrast, the three-factor model loading onto a second-order factor had much better fit, yielding a chi-square value of 213.98 (p < 0.001; df = 24), a GFI of 0.90, an NNFI of 0.93, and an SRMR of 0.04. Internal consistency reliability for this work sample was equivalent to the reliabilities of the student sample ($\alpha = 0.95$ and $\alpha = 0.94$, respectively). Taken as a whole, these results suggest that the nine-item expressed humility scale had sufficient reliability to proceed with other analyses.



Table 4 Study 1 Descriptive Statistics and Correlations

Variable	Mean	SD	1	2	3	4	5	6	7	8		
Expressed humility	3.21	0.85	(0.94)									
2. Modesty	2.66	0.66	0.62**	(0.84)								
3. Narcissism	1.38	0.30	-0.63**	-0.69**	(0.87)							
4. Conscientiousness	3.21	0.79	0.28**	0.22*	-0.35**	(0.90)						
5. Extraversion	3.04	0.87	0.11	0.06	0.10	-0.14	(0.88)					
6. Openness to experience	3.26	0.57	0.31**	0.09	-0.35	0.34**	0.06	(0.82)				
7. Emotional stability	3.54	0.73	0.49**	0.32**	-0.50**	0.17	0.08	0.19	(0.93)			
8. Core self-evaluation	3.32	0.59	0.34**	0.10	-0.41**	0.42**	0.12	0.51**	0.55**	(0.86)		
9. Honesty-humility ^a	3.21	0.77	0.55**	0.68**				0.28**			(0.90)	
10. Learning goal orientation ^a	3.54	0.77	0.63**	0.11				0.72**				(0.90)

Notes. n = 164. Scale alpha reliabilities are given on the diagonal (in parentheses).

Nomological Network Analysis. As a test of discriminant validity, we conducted two additional factor analyses to explore whether items from the expressed humility measure loaded with items of conceptually related constructs (see DeVellis 2011). First, using data from Sample A, the resulting nine items from the expressed humility scale were entered into a factor analysis along with the items representing trait extraversion, conscientiousness, emotional stability, openness to experience, modesty, core self-evaluations, and narcissism. Using data from Sample F, we entered the nine-item expressed humility scale with the honesty-humility and learning goal orientation items. Across these analyses, only two items from existing scales had cross loadings above 0.40 that loaded onto the expressed humility construct. We take this as strong evidence of discriminant validity for the expressed humility construct.

Table 4 reports the bivariate relationships between expressed humility and the traits of modesty, narcissism, components of the Big Five, and core self-evaluation. These relationships were in line with our expectations. Specifically, narcissism was negatively related to expressed humility (r = -0.63, p < 0.01). Modesty was positively related (r = 0.62, p < 0.01). Expressed humility was also positively related to openness to experience (r = 0.31, p < 0.01), emotional stability (r = 0.49,p < 0.01), conscientiousness (r = 0.28, p < 0.01), and core self-evaluations (r = 0.34, p < 0.01). Using data from Sample E, expressed humility was shown to be positively related to honesty-humility (r = 0.55, p <0.01) and learning goal orientation (r = 0.63, p < 0.01)(for convenience, correlations from both Samples A and E are reported in the same table). From a nomological validity standpoint, the other-report expressed humility scale seems to reflect a construct that fits within the theoretical network of constructs we have discussed.

Discussion

This study provides initial support for our conceptualization of expressed humility, its validity as observed by others, its relationship with other constructs, its underlying dimensionality, and its positive nature. This study also revealed initial support for external validity, as the factor structure and alpha reliabilities were equivalent from student and employee samples. However, this study lends no insight into the predictive validity of expressed humility. Thus, building off this initial evidence of construct validity, we seek in Study 2 to further establish expressed humility as an important construct in organizational contexts by examining its predictive validity.

Study 2: Relationship of Expressed Humility with Individual Performance and Quality of Team Member Contribution

In Study 2, we sought to further establish the validity of the expressed humility construct by examining (a) whether expressed humility enhances the quality of one's contribution on a team and (b) the incremental predictive validity of expressed humility over other major predictors of individual performance. In line with our discussion of the importance of expressed humility within organizational contexts, we expected that expressed humility would foster more meaningful and satisfying interrelations with others (Means et al. 1990, Exline et al. 2004). Increasingly, firms are organizing workers into teams in hopes of fostering synergies of experience, skills, and knowledge, as well as to encourage mutual mentoring and peer regulation. Research has shown, however, that the intended benefits of organizing around teams are often not realized because team member characteristics may starkly contrast with expressed humility. Members who display characteristics such as self-enhancement and arrogance are punished by other team members because of their disruptiveness to group functioning (see Anderson et al. 2006, Horowitz et al. 2006). In contrast, we expect that the behaviors of expressed humility (i.e., owning up to personal mistakes and weaknesses, being receptive to



^aHonesty-humility and learning goal orientation scores assessed using Sample E (n = 263), which also assessed expressed humility, modesty, and openness to experience.

^{*}p < 0.05; **p < 0.01.

feedback, and acknowledging the strengths and contributions of other team members) facilitate effective team functioning and make it more likely that team members will view humble team members as quality contributors to the team's efforts.

Hypothesis 1. Individual expressed humility is positively related to team member contribution ratings.

We also expect that expressed humility captures some unique adaptive behaviors important for individual performance that are not captured by common performance predictors. Specifically, we expect that the three expressed humility dimensions, as measured, represent behaviors that facilitate individual performance beyond conscientiousness, generalized self-efficacy, and general mental ability. First, humble people manifest a willingness to see themselves accurately, to work toward an unexaggerated understanding of personal strengths and weaknesses. We expect that this enhanced selfunderstanding about strengths and limitations should impact decisions about how much time and effort one should allocate to performance-related tasks. For example, those who overestimate their ability may allocate less time and effort than is needed, resulting in missing deadlines or sacrificing quality to finish tasks on time, thus leading to decreased performance. However, those who are willing to see themselves accurately will have a more precise sense of their abilities, leading to a more realistic view of how much time and effort will be needed to fulfill performance expectations. Humble people with this self-understanding will also "play to their strengths" where possible and seek help or feedback on the aspects of the task where they might be weak.

Second, the teachability component of expressed humility suggests that humility is associated with openness to feedback. Humble individuals are more likely to learn from their mistakes and take remedial action after low performance, leading to higher overall performance over time. Third, humility involves an appreciation of the strengths of others. In a performance context, people possessing high levels of humility should be less likely to discount or devalue the strengths or high performance of those around them. Therefore, it may be that those who are humble are more likely to notice and benefit from the positive modeling of high performers. Combined, we expect expressed humility to be positively associated with overall performance. Moreover, the positive performance benefits of expressed humility just discussed are not captured by general mental ability, conscientiousness, and self-efficacy, three of the most robust individual difference predictors of performance. Thus, we hypothesize the following.

Hypothesis 2. Individual expressed humility positively predicts individual performance, over and above generalized self-efficacy, conscientiousness, and general mental ability.

Method

Participants and Procedures. Subjects were 144 students from three sections of an upper-level undergraduate management course. In all, 51% of the subjects were male, 51% were Caucasian, the mean age was 22.8, and the mean level of work experience was 42 months. The class entailed completing a number of assessments throughout the quarter for which the students would be awarded course credit. Individual performance was based on the average of individual grades on tests and assignments (independent of team-related grades). This performance metric represents an objective proxy of participants' effort on assignments and tests throughout the course period and, we propose, reflects participants' diligence, timeliness, preparedness, and thoroughness. In the first month of the quarter, students were asked to complete an online self-assessment of general selfefficacy (Schwarzer and Jerusalem 1995) and conscientiousness (Barrick and Mount 1991). Sample items for general self-efficacy include "I can always manage to solve difficult problems if I try hard enough" and "It is easy for me to stick to my aims and accomplish my goals." Sample items for conscientiousness include "I try to perform all the tasks assigned to me conscientiously" and "When I make a commitment, I can always be counted on to follow through." Both assessments were measured on a five-point scale. One month later, students were asked to complete the Wonderlic Personnel Test (Wonderlic 1973, Dodrill 1983) as a measure of general mental ability.

On the first day of class, students were divided into teams for the purpose of working together on team-related assignments throughout the quarter and to complete a culminating final team project that entailed a written report and presentation at the end of the quarter. The structuring of this team project experience, and the frequent interaction it fostered, was created to provide the psychological (both mundane and experimental) realism to approximate a real project team in the work context (see Colquitt 2008). Thus, far from being a short-lived hypothetical lab experience, the students were in real, 10-week-long project teams.

Other-report expressed humility was gathered at the middle of the term and team member contribution ratings at the end of the term (after completing the team project but before they knew their team project or individual grades). Each group member rated each teammate on the expressed humility items validated in Study 1. Students were assured that their responses would be confidential (i.e., their team members would not know how they rated them) and that their ratings would not impact their team grades.

Demographic data, such as gender, race, age, and amount of work experience, were gathered as controls. Because we were trying to establish the predictiveness of expressed humility beyond established constructs



(especially those we have identified as conceptually related), we also included the measures of core selfevaluation (Judge et al. 2003) and openness to experience (McCrae and Costa 2004) with the intention of controlling for these constructs. We controlled for gender because past research suggests that females show more humility than males (Furnham et al. 2002). We controlled for age and work experience because scholars have suggested that humility might develop with accrued life experience (Tangney 2000), and we controlled for race because of the potential differences in the valuing and expressing of humility across collectivistic and individualistic cultures (Morris et al. 2005). Using a fiveitem scale, team members rated each other on the quality of their contributions to the team project. The items were anchored to a five-point Likert scale (1 = very low; 5 =very high); sample items from this scale included "The quality of this team member's contribution to the team project was...." and "The overall value that this team member added to the team was..." ($\alpha = 0.90$). These contribution scores were averaged and used as the criterion variable for testing Hypothesis 1. Because each participant's midterm humility score and end-of-term team member contribution score were based on the average of his or her team members' ratings, as a robustness check, we ran analyses only including groups with an r_{wg} of more than 0.80. However, the results were equivalent regardless of whether we included groups with these low r_{wg} scores, so we report our results with the full sample.

Results

Table 5 contains descriptive statistics and bivariate correlations for all the study variables. Expressed humility showed a significant positive relationship with team contribution (r = 0.33, p < 0.01) and individual performance (r = 0.35, p < 0.01). Table 6 reports the results of regression analyses to test the hypothesis

that expressed humility would predict team member contribution ratings and individual performance above and beyond conscientiousness, generalized selfefficacy, and general mental ability. Comparing Model 2 to Model 3 under the "Team contribution" column, after controlling for age, gender, race, work experience, core self-evaluation, and openness to experience, expressed humility positively predicted quality of team contribution above and beyond conscientiousness, self-efficacy, and general mental ability ($\beta = 0.34$, $\Delta R^2 = 0.10$, p < 0.001). Thus, Hypothesis 1 was supported. Comparing Model 2 to Model 3 under the "Individual performance" column, after controlling for age, gender, race, and work experience, expressed humility positively predicted individual performance above and beyond conscientiousness, self-efficacy, and general mental ability ($\beta = 0.23$, $\Delta R^2 = 0.05$, p < 0.01). Thus, Hypothesis 2 was supported.

Post Hoc Analyses. Recent research has shown that some individual characteristics can compensate for low general mental ability on performance tasks. In one example, Côté and Miners (2006) found a compensatory effect for emotional intelligence such that the relationship between emotional intelligence and performance became stronger as general mental ability became weaker. Part of the rationale for this compensatory model was that emotional intelligence facilitates aspects of performance that raw general mental ability does not, such as identifying and regulating self and others' emotions in working toward cooperative goals. We have discussed how humility may facilitate a more realistic allocation of personal resources toward completing tasks, the likelihood of taking remedial action after receiving negative feedback, and enhanced social learning. Thus, humility may also compensate for low general mental ability. To examine this possibility, we created an interaction term using the expressed humility and

Table 5 Study 2 Descriptive Statistics and Correlations

Var	iable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1.	Gender ^a	0.48	0.50											
2.	Race ^b	0.52	0.50	-0.20**										
3.	Age	21.67	2.90	0.03	0.01									
4.	Work experience	38.10	31.70	0.02	0.09	0.54								
5.	Openness	3.32	0.50	0.04	0.08	0.05	0.01							
6.	Core self-evaluation	3.79	0.58	-0.02	0.19*	-0.03	-0.03	0.06	(0.75)					
7.	Self-efficacy	3.92	0.50	-0.01	0.11	-0.03	0.02	0.28**	0.70**	(0.77)				
8.	Conscientiousness	3.83	0.51	0.15*	0.10	0.01	0.07	0.03	0.36**	0.36**	(0.84)			
9.	General mental ability	26.65	5.79	-0.26**	0.18*	-0.20**	-0.03	-0.10	0.17*	0.31**	-0.07			
10.	Expressed humility	3.84	0.39	0.17*	-0.09	0.17*	0.09	-0.03	-0.12	-0.08	0.18*	-0.02	(0.94)	
11.	Team contribution	4.18	0.74	0.23**	-0.03	-0.10	0.15	-0.07	0.08	-0.02	0.30	0.11	0.33**	(0.90)
12.	Individual performance	0.85	0.10	0.06	-0.05	-0.28**	-0.18**	-0.02	0.15*	-0.07	0.14*	0.16*	0.35**	0.70***

Notes. n = 144. Scale alpha reliabilities are given on the diagonal (in parentheses)

p < 0.05; p < 0.01.



^aRepresents a dummy variable: male = 0, female = 1.

^bRepresents a dummy variable: non-Caucasian = 0, Caucasian = 1.

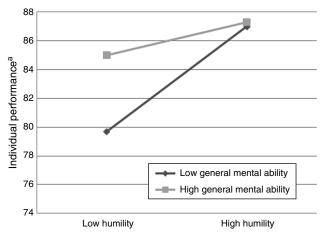
Table 6 Results of Regression Analyses for Comparing the Predictiveness of Expressed Humility, Conscientiousness, Generalized Self-Efficacy, and General Mental Ability on Individual Performance and Performance Improvement

		Team co	ntribution		Individual performance				
Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	
Controls									
Gender	a0.22*	0.23*	0.22*	0.22*	0.21*	0.18^{\dagger}	0.17^{\dagger}	0.17^{\dagger}	
Race	0.06	-0.01	-0.01	-0.02	0.08	0.03	0.03	0.02	
Age	-0.13	-0.07	-0.12	-0.12	-0.03	0.03	-0.01	-0.01	
Work experience	0.23^{\dagger}	0.21†	0.18	0.19^{\dagger}	0.00	-0.05	-0.07	-0.06	
Openness	-0.02	-0.05	-0.06	0.02	-0.05	-0.03	-0.03	0.01	
Core self-evaluation	0.16^{\dagger}	0.06	0.10	0.11	0.17^{\dagger}	0.07	0.10	0.10	
Predictors									
Self-efficacy		-0.12	-0.10	-0.13		-0.13	-0.12	-0.16	
Conscientiousness		0.33*	0.26**	0.27**		0.39***	0.37**	0.38***	
General mental ability		0.21*	0.20*	0.21*		0.17^{\dagger}	0.16^{\dagger}	0.17^{\dagger}	
Expressed humility			0.34***	0.36***			0.23**	0.27**	
Interaction terms									
Expressed humility × General mental ability				-0.21*				-0.23**	
F	2.22*	3.24**	4.89***	5.23***	1.56	3.20**	3.74***	4.30***	
R^2	0.11	0.22	0.32	0.36	0.08	0.21	0.26	0.31	
ΔR^2		0.11*	0.10***	0.04*		0.13**	0.05**	0.05**	

Note. n = 144.

general mental ability variables. As shown in Model 8 in Table 6, the interaction term accounted for significant additional variance, suggesting that expressed humility interacts with general mental ability to predict individual performance ($\beta = -0.23$, $\Delta R^2 = 0.05$, p < 0.01). In Figure 1, the slopes suggest that expressed humility has a compensatory effect on performance for those with lower general mental ability. In other words, though expressed humility had a relatively small positive impact on performance for those with high general mental ability, expressed humility made a considerable difference in performance for those with low general mental ability.

Figure 1 The Compensatory Effect of Expressed Humility on the Relationship Between Intelligence and Individual Performance



^aRepresents percentage points.

To separately test one of the reasons why expressed humility may compensate for poor performance—that those with humility will be more likely to take remedial action to improve poor performance (teachability) we conducted an additional analysis to assess whether humility predicted improvement in test performance over time. All student participants took a midterm (test 1) and a final exam (test 2) during the quarter. The overall class averages for the midterm and final exams were equivalent (M = 0.81 and M = 0.80, respectively). We examined whether expressed humility predicted performance on test 2 while controlling for performance on test 1. In our hierarchical regression analysis, age, gender, race, work experience, and test 1 scores were controlled for in block 1. General self-efficacy, conscientiousness, and general mental ability (the common performance predictors) were entered in block 2; expressed humility was entered in block 3. Compared with self-efficacy, conscientiousness, and general mental ability, expressed humility was the strongest predictor of individual performance improvement, explaining 9% of the variance in improvement in test scores above and beyond the other variables $(\beta = 0.39, \Delta R^2 = 0.09, p < 0.01).$

Discussion

The main purpose of Study 2 was to further validate the expressed humility scale by analyzing its criterion validity. We hypothesized that expressed humility would enhance one's ability to work well with others and would enhance individual performance. As expected, expressed humility was predictive of team contribution ratings and individual performance beyond the related constructs of



^aAll values reflect standardized beta coefficients.

 $^{^{\}dagger}p < 0.10$; $^{*}p < 0.05$; $^{**}p < 0.01$; $^{***}p < 0.001$.

core self-evaluation and openness to experience and the common performance predictors of self-efficacy, conscientiousness, and general mental ability. We also uncovered an interesting interactive effective with intelligence. In addition to being predictive of individual performance above and beyond common performance predictors, expressed humility was shown to have a compensating effect on performance for those with lower general mental ability. Unlike team contribution ratings, individual performance was derived from a source that was independent of expressed humility ratings and thus is a key strength of this study. Expressed humility was hypothesized to predict unique variance in performance because it captures adaptive behaviors that are not reflected in trait conscientiousness, self-efficacy, or general mental ability. Specifically, expressed humility reflects receptiveness to feedback (teachability), betterinformed decisions about attributes needed to meet task performance expectations (viewing oneself accurately), and receptivity to the positive modeling of peers (appreciation of others' strengths). This study also showed that expressed humility predicts unique variance in performance beyond the constructs of core self-evaluation and openness to experience; this suggests that the conceptual differences between expressed humility and these related constructs have practical implications for predicting important outcomes. In addition, relative to all other study constructs, expressed humility was the best predictor of performance improvement.

However, Study 2 also had some limitations. First, because both humility and team member contributions were assessed the same way, this relationship could be a methodological artifact, though common method variance would not apply to the performance dependent variable. Also, it should be noted that we have no evidence regarding some of the mediating mechanisms we mention in our hypothesis rationale, such as feedback-seeking behaviors and mimetic behaviors.

Organizational Validity

Study 3: The Influence of Leader-Expressed Humility on Follower Outcomes

Study 1 provided support for the three-dimensional nature of the expressed humility construct (willingness to see the self accurately, appreciation of others' strengths, and teachability) and established evidence for construct and nomological validity. Study 2 provided initial evidence for the predictive validity of expressed humility by testing its connection to team contribution ratings and individual performance. Building off Studies 1 and 2 and in an effort to further establish the predictive and external validity of the new expressed humility construct, Study 3 aimed to provide evidence that expressed humility positively influences important outcomes within real organizational contexts. Given the

proposed interpersonal nature of expressed humility, and because much of the current literature has speculated about the importance of leader humility in general, in this study we focused specifically on the implications of expressed humility in leader–follower relations.

Recent qualitative research suggests that expressed humility might be an important leader attribute. In a study that explored the behaviors, effects, and contingencies of leader humility (Owens and Hekman 2012), humility was found to have important implications for learning, employee engagement, and employee job satisfaction. As qualitative insights, these outcomes have not yet been confirmed by quantitative empirical study. Thus, in this study we focused on a quantitative analysis of the influence of leader-expressed humility on team learning orientation and employee job engagement (Path 1) and on employee job satisfaction and voluntary turnover (Path 2).

Path 1: Team Learning Orientation and Team Member Engagement. Team learning orientation refers to "a shared perception of team goals related to learning and competence development" (Bunderson and Sutcliffe 2003, p. 553). In other words, it refers to the degree to which a team is oriented toward proactive learning, reflecting a desire to develop new competencies, master new situations, and acquire new skills (see Table 1). Although learning orientation can be considered a stable characteristic, research has also shown that it can be primed (i.e., fostered, reinforced) by situational factors. Two important situational factors that have been shown to influence goal orientation are leadership (i.e., transformational; see Gong et al. 2009) and authority relations (Ames 1992, Turner et al. 2002). Specifically, different leadership approaches have been shown to sanction or discourage learning orientations and behaviors in teams. Although "authoritarian" leaders have been found to inhibit team member learning behavior (Edmondson 1999), we propose that leaders who express humility will (1) look for, (2) recognize, and (3) appreciate the development of new competencies and skills. They will enact the humble behaviors of admitting their own mistakes and limitations, modeling teachability and openness to learning, and acknowledging the strengths and contributions of team members, which will foster a team climate in which team members are more focused on development and more willing to risk engaging in learning behaviors.

More specifically, leaders who show the behaviors of humility help legitimize learning and personal development (i.e., send a signal to employees that it is okay to be "in process" here; see Owens and Hekman 2012) and foster openness, trust, and recognition, which have been shown to be antecedents of learning goal orientation (see Bunderson and Sutcliffe 2003 for a review). Therefore, we propose the following hypothesis.



HYPOTHESIS 3. Leader-expressed humility is positively related to team learning orientation.

In addition to team orientations, our review of the literature also suggested that leaders' display of humility has positive motivational effects on individual employees. One specific positive effect of leader humility that was evident from our review is enhanced employee job engagement. Job engagement reflects the degree to which individuals invest their entire selves in their work roles (i.e., physical, emotional, and cognitive; see Rich et al. 2010) and has been captured by the level of absorption, vigor, and dedication an individual has toward his work (Schaufeli and Bakker 2004). We know from past research that when leaders show what may be viewed as a lack of humility (taking all the credit for success, overestimating their contributions relative to others, not listening), followers disengage and lose their motivation to work hard under their leader (see Burke 2006, Lubit 2002). However, we expect that leaders who show humility by acknowledging the strengths and contributions of followers and being teachable will help foster the preconditions for employee engagement, such as "dignity, self-appreciation, and a sense of value" (Kahn 1990, p. 705). This connection between leader humility and employee job engagement was also found in recent qualitative research (Owens and Hekman 2012).² In light of this review, we propose the following hypothesis.

Hypothesis 4. Leader-expressed humility is positively related to employee engagement.

Furthermore, we propose that the group climate of learning and development—which we suggest is fostered by humble leader behaviors—will enable individual group members to invest more of themselves in their job roles (i.e., be more engaged) because an intrinsic orientation toward learning has been associated with increased engagement in past research (Meece et al. 1988). Moreover, Kahn (1990) suggested that both supportive leadership and the tone of the work group are important antecedents of job engagement. Thus, we expect that the effect of leader-expressed humility on employee job engagement is through the team learning orientation that humble leader behaviors help foster.

Hypothesis 5. The positive relationship between leader-expressed humility and employee job engagement is mediated by team learning orientation.

Path 2: Job Satisfaction and Voluntary Turnover. We also theorize that leader humility will have a positive effect on employee job satisfaction. There is substantial literature showing that the leader has a major influence on his or her employees' overall job satisfaction (see meta-analysis from Dirks and Ferrin 2002). Insights from qualitative research and theoretical work on leader humility also point specifically to a connection between leader-expressed humility and positive

employee job attitudes, such as job satisfaction (Owens and Hekman 2012, Morris et al. 2005). Among other things, job satisfaction is shaped in large part by favorable perceptions of supervisors or leaders (Russell et al. 2004). Second, almost all measures of job satisfaction (e.g., the Job Descriptive Index) have a dimension that reflects one's satisfaction with supervision. Nearly threequarters of employees report that the worst aspect of their job is their immediate boss (Hogan and Kaiser 2005), and many of the complaints employees have about their leaders appear to reflect the opposite of the proposed dimensions of expressed humility (i.e., arrogance (Dotlich and Cairo 2003); devaluing the opinions or views of others (Fulmer and Conger 2004); thinking they have all the answers or having an inflated self-view (Finkelstein 2003)). In contrast, we expect that leaders who present a realistic view of themselves (i.e., awareness of weaknesses and mistakes), who are open to the ideas of others, and who give employees due credit for their contributions and strengths will help employees generally feel better about their overall job experience.

HYPOTHESIS 6. Leader-expressed humility is positively related to employee job satisfaction.

We also know from numerous studies that the relationship with the boss is a critical factor in determining whether employees choose to stay or not. One's "immediate supervisor is perhaps one of the most influential people in his or her work life," influencing job performance, job attitudes, well-being, and attachment (Perry et al. 2010, p. 1145). Indeed, leadership quality has been shown to be a powerful predictor of employee turnover (see Richardson and Vandenberg 2005) and in some cases just as powerful a predictor as employee attitudes (see Ferris 1985). In addition, past studies have shown that leaders who recognize the potential of employees and have a relationship of mutual disclosure (factors that reflect dimensions of leader-expressed humility) are more likely to retain their followers (Graen et al. 1982). Thus, we expected the following.

Hypothesis 7. Leader-expressed humility is negatively related to voluntary employee turnover.

The question, of course, is how leader-expressed humility more specifically influences the desire to stay or leave. We would suggest that job satisfaction mediates leader-expressed humility and employee turnover for the following reasons. First, job satisfaction is the strongest single predictor of turnover. Starting with March and Simon (1958), and including the metanalysis by Griffeth et al. (2000) and the more recent review in the *Academy of Management Annals* by Holtom et al. (2008), job satisfaction has emerged as the primary conduit through which other variables influence turnover (Hom and Griffeth 1995). Job satisfaction has been shown to mediate relationships between many



aspects of the job (e.g., compensation, nature of the work, advancement opportunities, work group relations) and turnover (Boswell et al. 2005). Dickter et al. (1996, p. 706) go so far as to say "in most studies of turnover in the organizational literature job satisfaction is the key psychological construct leading to turnover." Given our hypothesis suggesting that leader humility fosters increased job satisfaction, and because job satisfaction is one of the strongest predictors of voluntary turnover, we propose that the relationship between leader humility and voluntary turnover is mediated by job satisfaction.

Hypothesis 8. The negative relationship between leader humility and voluntary turnover is mediated by employee job satisfaction.

Method

Sample and Procedure. We sampled employees of a large U.S midwestern health services organization. This sample contained 704 employees rating 218 leaders (mean group size was 3.56 employees); 72% of the employees were female and 70% were Caucasian. The average age and tenure under their current leader of this sample was 37 years and 12.5 months, respectively.

We were given permission to include our measures of the study constructs with the organization's own annual confidential assessment. Each employee in the organization was invited through email to complete a voluntary, two-part annual organizational assessment. Parts 1 and 2 were administered online approximately one month apart, and the response rates were 67% and 54%, respectively. In part 1, participants were asked to rate their immediate leader or supervisor on the nine humility items developed in Study 1. Part 1 also contained questions asking for demographic information (gender, age, race, and tenure under current leader). Part 2 contained a 5-item team learning orientation scale (Bunderson and Sutcliffe 2003), a 12-item job engagement scale (Schaufeli et al. 2002), and a 7-item job satisfaction scale (Cook et al. 1981). Sample items from the team learning orientation scale include "My team sees learning and developing skills as very important" and "My team likes challenging and difficult assignments that teach new things." Sample items from the job engagement scale include "I am immersed in my work" and "At my job, I am very resilient, mentally." Sample items from the job satisfaction scale include "All in all, how satisfied are you with your job?" and "All in all, how satisfied are you with the persons in your work group?" Humility and job satisfaction were measured on five-point scales (5 = strongly agree and 5 = verysatisfied, respectively). Team learning orientation and job engagement were measured on a seven-point agreement scale (7 = strongly agree). As noted above, team learning orientation, job satisfaction, and job engagement were measured one month after leader-expressed humility in an effort to reduce common method variance through temporal separation (Podsakoff et al. 2003). Approximately four months after the part 2 assessment was administered, we requested and received voluntary turnover data from the company for all participants.

Analyses. Because of the multilevel and nested nature of the data (i.e., groups of employees rating their leader), we tested Hypotheses 4–8 using hierarchical linear modeling (i.e., HLM 7.0). We used regression analyses to test Hypothesis 3, given that leader humility and team learning goal orientation were both group-level variables. The average r_{wg} values for the level 2 variables, leader humility and team learning goal-orientation, were both 0.93. As a robustness check we ran all analyses excluding all groups with an r_{wg} below 0.80. Because the results were equivalent to the results using the full sample, we report model output statistics from analyses with the full sample. For HLM analyses, we specified continuous distribution outcome variables when predicting job satisfaction and job engagement and the Bernoulli distribution (which is appropriate for binary outcome variables) when predicting voluntary turnover. To test improvement of model fit, we compared deviance statistics across models based on a 2-log-likelihood calculation (the higher the deviance statistic, the poorer the fit between the model and the data). Thus, we were looking for a significant reduction in the deviance statistic to discern whether one model fits the data better than the others. We used a Laplace deviance estimation for all analyses involving voluntary turnover, as recommended by Snijders and Bosker (1999, pp. 218-219). Because our research question centers on understanding how our level 2 predictor (leader humility) affects the proportion of variance observed in each group (see Neuhaus et al. 1991), we report the unit-specific model with robust standard errors. To test our multilevel mediation hypotheses for our leader humility (level 2) to job satisfaction (level 1) to voluntary turnover (level 1) path, we separated within- and between-group effects by group centering the mediation variable at level 1 and reintroducing the group average of the mediator at level 2, as recommended by Zhang et al. (2009, p. 698). Because Path 2 entails a level 2 mediator (i.e., a 2-2-1 model), we used the grand-mean centering approach also recommended by Zhang et al. (2009, p. 700). We also report a Freedman and Schatzkin (1992) t-statistic to indicate the significance of the mediation effect (for the equation, see Zhang et al. 2009, p. 697).

Results. Descriptive statistics and bivariate correlations for all study variables are presented in Table 7. Leader-expressed humility was positively related to job engagement (r = 0.25, p < 0.01) and job satisfaction (r = 0.44, p < 0.01), and it was negatively related to voluntary job turnover (r = -0.14, p < 0.01). Job engagement and job satisfaction were also negatively related to



Table 7 Study 3 Descriptive Statistics and Correlations

Variable	Mean	SD	1	2	3	4	5	6	7	8
1. Gender ^a	0.72	0.45								
2. Race ^b	0.70	0.46	0.08*							
3. Age	37.45	11.05	0.09*	0.12**						
4. Tenure under leader ^c	12.51	12.75	0.06^{\dagger}	0.07^{\dagger}	0.10**					
5. Leader-expressed humility	3.90	0.89	0.05	0.07^{\dagger}	0.03	0.05	(0.97)			
6. Job engagement	4.89 ^d	0.94	0.08*	0.04	0.19**	0.10**	0.25**	(0.92)		
7. Job satisfaction	3.55	0.71	0.01	0.08*	0.02	0.06^{\dagger}	0.44**	0.64**	(0.82)	
8. Team LGO ^e	5.01 ^d	1.13	-0.01	-0.06	0.09*	0.02	0.35**	0.46**	0.52**	(0.92)
9. Voluntary turnover ^f	0.11	0.32	0.06	-0.02	0.04	-0.03	-0.14**	-0.10**	-0.16**	-0.05

Notes. N = 704 employees. Scale alpha reliabilities are given on the diagonal

turnover (r = -0.10, p < 0.01 and r = -0.16, p < 0.01, respectively).

Table 8 shows the results of the regression and HLM analyses testing Hypotheses 3–5. In support of Hypothesis 3, leader-expressed humility was positively related to team LGO after controlling for demographic differences (as shown in Model 2; b = 0.53, $\Delta R^2 = 0.27$, p <0.001). Model 4 provides support for Hypothesis 4, as leader-expressed humility was positively related to job engagement after controlling for demographic differences ($\gamma_{01} = 0.21$, p < 0.01). In line with the recommendations from Zhang et al. (2009) for testing multilevel mediation effects, we added grand-mean-centered team LGO to the equation in Model 5. The relationship between leader-expressed humility and job engagement decreased to nonsignificance, suggesting a full mediation effect of team LGO ($\gamma_{02} = 0.30, p < 0.001$) and providing support for Hypothesis 5. The Freedman and Schatzkin (1992) t-statistic for this mediation effect was also significant (t = 6.61, p < 0.001), providing additional confirmation of Hypothesis 5.

Table 9 reports the results for the tests of Hypotheses 6–8. Model 2 shows support for Hypothesis 6, as leader-expressed humility was positively related to job satisfaction after controlling for demographic differences ($\gamma_{02} = 0.34$, p < 0.01). Model 4 shows that leader-expressed humility was negatively related to voluntary turnover ($\gamma_{01} = -0.82$, p < 0.01), supporting Hypothesis 7. As shown in Model 5, this effect was mediated by job satisfaction ($\gamma_{60} = -1.41$, p < 0.001), providing support for Hypothesis 8. The Freedman and Schatzkin (1992) t-statistic for this mediation effect was significant (t = -1.82, p < 0.05), providing additional support for Hypothesis 8.

Discussion

There are three key contributions this study makes that deserve mentioning. First, although several theoretical and qualitative studies suggest the importance of leader-expressed humility (Morris et al. 2005, Nielsen et al. 2010, Owens and Hekman 2012, Vera and Rodriguez-Lopez 2004), this is the first quantitative study that empirically tests the benefits of leaders humility in organizational contexts. Second, this study provides important insight into the job engagement literature, which is still not definitive about what leadership approaches best foster engaged employees. In contrast to "rousing" employees through charismatic, energetic, and idealistic leadership approaches (empirical evidence has been inconsistent about these approaches; see Dvir et al. 2002), our study suggests a "quieter" leadership approach, with listening, being transparent about limitations, and appreciating follower strengths and contributions as effective ways to engage employees. Third, this study also extends what previous research has found regarding the impact of leadership style on retaining employees. Companies fiercely compete to attract and retain talented employees (Michaels et al. 2001), and many talented employees leave firms because they feel that their immediate leaders do not recognize their potential or listen to them (Burke 2006). It seems, then, that leader-expressed humility may be even more important as firms work to attract and retain talented individuals. Overall, the meaning of expressed humility derived from our literature search and initial empirical testing appears to have important implications for employee attitudes and organizational outcomes in the workplace.

We should also mention two limitations that are apparent to us. First, we have suggested causal relationships in our hypotheses and the direction of these causal links. We are fairly confident that Path 2 with expressed humility, job satisfaction, and turnover makes sense theoretically and has some support empirically. Also, our measurement of satisfaction was one month after measuring expressed humility, and we obtained turnover four



^aRepresents a dummy variable: male = 0, female = 1.

^bRepresents a dummy variable: non-Caucasian = 0, Caucasian = 1.

[°]Represents the number of months of tenure under the current leader.

^dScaled to a seven-point agreement scale

^eReflects team learning goal orientation.

^fRepresents a binary variable of voluntary turnover: voluntary turnover = 1.

 $^{^{\}dagger}p < 0.10; *p < 0.05; **p < 0.01.$

Table 8 Study 3 (a) Regression and (b) HLM Analyses
Testing the Predictiveness of Leader-Expressed
Humility on Team Learning Goal Orientation (Time 1)
and Job Engagement (Time 2)

Panel (a): Regression								
Variable	Model 1	Model 2						
Controls ^a								
<i>Gender</i> (mean) ^b	-0.01	-0.09						
Race (mean)°	-0.01	-0.06						
Tenure (mean)	0.05	0.03						
Tenure under leader (mean)	0.02	0.00						
Predictor								
Leader-expressed humility		0.53***						
F R ²	0.19 0.00	12.96*** 0.27						
ΔR^2		0.27***						

	Panel (b): HI	_M	
Variable	Model 3	Model 4	Model 5
Intercept Controls	4.06***	3.09***	4.92***
L1: $Gender^b(\gamma_{10})$ L1: $Race^c(\gamma_{20})$ L1: $Tenure(\gamma_{30})$ L1: $Tenureunder$ $leader(\gamma_{50})$	0.04 -0.08 0.03*** 0.00	0.04 -0.08 0.03*** 0.00	0.04 0.04 0.02*** 0.00
Predictors L2: Leader-expressed humility (γ ₀₁) L2: Team LGO (γ ₀₂)		0.21**	0.10 0.30***
Log likelihood $-2[L(\beta_{\text{reduced}} - \beta_{\text{full}})]$	1,674.00	1,661.42 -15.14**	1,637.72 -72.55***

Notes. n=704 employees; k=218. For Models 1 and 2, the dependent variable is *team LGO*; for Models 3–5, the dependent variable is *job engagement*. All regression values reflect standardized beta coefficients. L1 suggests a level 1 variable; L2 suggests a level 2 variable.

months after measuring satisfaction. Though turnover can most certainly be a factor leaders could be judged on (and thus also be a cause of subsequent expressed humility), we believe our data support the direction we hypothesized. We are less sure about the causal direction for Path 1. We measured both team LGO and engagement at the same time. Although we have argued for team LGO as the mediator, one could argue that engagement may enhance LGO. We think our logic makes sense, but more empirical evidence is clearly needed here.³ We also did not directly measure all the mediating mechanisms we included in our hypothesis rationale (i.e., increased mutual disclosure and trust).

The other limitation has to do with the fact that we have three dimensions of expressed humility, and in this study (as well as Study 2) we might find differential strength of effects for the humility dimensions and their relationships to our dependent variables. We did not do this for two reasons. First, we felt that our initial presentation and tests of our expressed humility construct should include the whole set of dimensions. We did not have the theoretical depth, previous empirical findings or experience with our new construct to make differential hypotheses. Second, we believe differential hypotheses would partly be a function of the types of people in the study, the type of industry involved, and various on-site particulars, such as leadership training, past history, and organizational culture. We suggest that future research should seek to gain more nuanced insights about the effects of humility by parsing out the unique effects of the expressed humility dimensions.

General Discussion

To make a significant theoretical contribution, our overarching goals for this research were to (1) define expressed humility in a parsimonious, theoretically novel and meaningful way that extends beyond the current literature; (2) develop a psychometrically robust measure of expressed humility and provide foundational evidence for its construct, nomological, and predictive validity; and (3) show that expressed humility is important in organizational contexts. The three studies we have reported represent at least five important and novel contributions to the current literature. First, as the result of our literature review, we synthesize previous conceptualizations of humility into one clear, operationalizable definition that portrays expressed humility as a multifaceted strength displayed in a social and interpersonal context. This parsimonious synthesis of the expressed humility dimensions, for which we have shown empirical support, is an important contribution, given that some present humility as a complex construct with up to 13 different indicators or dimensions (Vera and Rodriguez-Lopez 2004). Though some question the concept of humility as a virtue or strength (Hume 1994, pp. 219, 270) and some subjects still categorize humility as associated with humiliation and lowliness (see Exline and Geyer 2004, Grenberg 2005), our research adds important evidence in this debate, as our strengths-based view of humility was supported by the positive relationships we found between expressed humility and positive attitudes, traits, and adaptive behaviors (i.e., self-esteem via core self-evaluation, emotional stability, self-efficacy, performance improvement, learning orientation, and engagement). The fact that "the willingness to see oneself accurately" component of expressed humility was positively related to these positive attitudes, traits, and adaptive behaviors supports the notion that realistic self-views



 $^{^{\}rm a}\text{All}$ controls for regression Models 1 and 2 represent the team mean for each variable.

^bGender coded as 1 = male, 0 = female.

 $^{^{\}circ}$ Race coded as 1 = white, 0 = minority.

 $^{^{\}dagger}p < 0.10; \ ^{*}p < 0.05; \ ^{**}p < 0.01; \ ^{***}p < 0.001.$

Table 9 Study 3 Hierarchical Linear Modeling Analyses Testing the Predictiveness of Leader Humility (Time 1) on Job Satisfaction and Voluntary Turnover (Time 2)

Variable	Model 1	Model 2	Model 3°	Model 4°	Model 5°
Intercept (γ_{00})	3.57***	3.58***	-3.56***	-3.72***	1.02
Controls					
L1: $Gender^{a}(\gamma_{10})$	-0.01	-0.01	0.85	0.91	0.09^{\dagger}
L1: <i>Race</i> ^b (γ ₂₀)	0.18*	0.18**	-0.28	-0.27	-0.06
L1: Tenure (γ_{30})	0.00*	-0.02*	0.00	0.00	0.01
L1: Tenure under leader (γ_{50})	-0.01^{\dagger}	0.01	-0.03	-0.03^{\dagger}	-0.04^{\dagger}
Predictor					
L2: Leader-expressed humility (γ_{01})		0.34***		-0.82**	-0.33
Mediators					
L2: Job satisfaction group average (γ_{02})					-1.43*
L1: Job satisfaction (γ_{60})					-1.41***
Log likelihood	1.473.89	1.451.70	1.332.97	1.327.65	1.311.91
$-2[L(eta_{ ext{reduced}} - eta_{ ext{full}})]$,	-44.37***	,	-10.64*	-31.48***

Notes. n = 704 employees; k = 218. For Models 1 and 2, the dependent variable is job satisfaction; for Models 3–5, the dependent variable is voluntary turnover. L1 suggests a level 1 variable; L2 suggests a level 2 variable.

are more beneficial than exaggerated/inflated ones (Taylor and Brown 1988, Taylor 1989, Colvin et al. 1995). Furthermore, the empirical results of Study 1 lend strong support for the validity and reliability of our new expressed humility scale using an observer-report format. Thus, our definition and operationalization of expressed humility is a critical contribution to the humility literature, enabling empirical testing for heretofore speculative statements about the importance of humility in organizations.

Second, Study 2 provided evidence that expressed humility explains unique variance in performance above and beyond general mental ability, self-efficacy, and conscientiousness. Intelligence taps what level a person can perform, and conscientiousness and self-efficacy tap what level a person is motivated to perform; expressed humility captures a person's receptivity to the positive social modeling of others and responsiveness to feedback in taking remedial action after events of poor performance (i.e., performance improvement over time). Third, expressed humility demonstrated a compensatory effect on performance for those with lower general mental ability. Though the link between general mental ability and performance has a long history, more recently, scholars have called for and given more attention to other individual differences that may predict performance (Schmidt and Hunter 2004, Poropat 2009). Measures of raw general mental ability may reflect cognitive processing speed and the ability to grasp new concepts. But the ability to learn is not the same thing as a willingness to learn. General mental ability says little about how willing someone is to seek and apply critical feedback, admit mistakes, and benefit from the positive modeling of others. Humble people with lower general mental ability may still perform well because they may be more willing to enact these learning behaviors to master performance tasks.

Fourth, given the general trend of organizing around teams, constructs such as expressed humility may make unique contributions to explain aspects of an individual's performance at work, above and beyond general mental ability. How one responds to the increased frequency and intensity of association with others may be important for understanding who thrives and does not thrive in team-based environments. As we showed in Study 2, expressed humility was positively related to team contribution ratings. Thus, the tendencies of feedback receptivity, enhanced social learning, and having realistic views of oneself may be particularly beneficial for individual performance improvement and effectiveness in these team-based contexts. Finally, Study 3 provides evidence that expressed humility is an important component of effective leadership in modern organizations. In this study we showed that humble leaders foster learningoriented teams and engaged employees as well as job satisfaction and employee retention. Showing external and predictive validity for leader-expressed humility construct enables the existing propositions about humble leadership to be empirically tested (see Morris et al. 2005, Nielsen et al. 2010, Owens and Hekman 2012).

Limitations and Directions for Future Research

Although our work clearly makes some important contributions, there are also some limitations. First, the degree to which the findings of Study 2 generalize to the workplace is uncertain, given the student sample and



 $^{^{}a}$ Gender coded as 1 = male, 0 = female.

^bRace coded as 1 = white, 0 = minority.

^cBecause voluntary turnover is a binary outcome variable, the Bernoulli function and Laplace deviance estimation (Snijders and Bosker 1999, pp. 218–219) were used when computing this model.

 $^{^{\}dagger}p < 0.10; *p < 0.05; **p < 0.01; ***p < 0.001.$

the performance criteria. However, the experience upon which the expressed humility ratings were based—team member interactions in longitudinal project teams—were designed to simulate a realistic work context. Thus, though our objective measure of individual performance was clearly academic, the measuring of expressed humility (our main theoretical focus) by members of a longstanding project team provides a naturalistic setting that closely approximates a real work-team context. We also felt, given the implications of expressed humility on learning, that exploring the connection between expressed humility and performance in an educational context was a good theoretical "fit" with conducting initial explorations of this new construct. Testing whether expressed humility explained variance beyond mental ability in an academic environment seemed more conservative, because this is the environment where mental ability has historically been the most predictive of performance (compared with the work context; see Murphy 1996). Though our hypothesized relationships were confirmed in this educational setting, we encourage future research to replicate the relationships between expressed humility and performance and the expressed humility compensatory effect in a work setting.

Second, the results from Study 3 may be inflated because we used a common source of data for ratings of leader-expressed humility, follower job satisfaction, job engagement, and team learning orientation. However, we sought to minimize common method variance by temporally spacing the measurement of predictor and criterion variables and by using different referents (i.e., leader, self, team) for rating the study constructs (Podsakoff et al. 2003). There were limitations in each study, but we propose that the strengths of each help compensate for the weaknesses of the others (see Wiesenfeld et al. 2007, p. 1250). As a set, we suggest that the eight samples used across our three studies provide convincing support that expressed humility is a unique, valid, and predictive construct that deserves more attention in organizational research.

Third, although our studies provide a foundation for what expressed humility is, what it is associated with, and what it influences, they say little about what individual or situational factors foster the expression of humility in the workplace. Future research should seek to more fully understand the antecedents of expressed humility. Such understanding will help better inform organizations on how to select for or develop this attribute in employees and leaders. Exline et al. (2004) suggest that secure relational attachments, reality-based feedback about one's strengths and weaknesses, and not having extreme emphasis placed on performance in one's past school (and perhaps work) experience may be antecedents of personal humility. Future research should also examine how relative power, status, and

other demographic characteristics influence the expression of humility (Owens and Hekman 2012).

We also see the need for more research on the effects of expressed humility. We suggest that our peer-report scale may allow researchers to address questions such as those proposed by Tangney (2000), including to what degree expressed humility might be related to dimensions of psychological and physical health, the development of other virtues (e.g., forgiveness, altruism), its connection to common cognitive biases (e.g., overconfidence or hindsight bias) and emotions (e.g., pride, envy), and the degree to which expressed humility may help or hinder occupational success in a competitive world. We also encourage future research to explore team memberexpressed humility in team contexts and, specifically, to examine whether the interactive effects of expressed humility and intelligence on team member contributions, process, and outcomes may vary across different types of team tasks (i.e., disjunctive, conjunctive; see Steiner 1972).

In addition, future research should further explore the relevance and benefits of expressed humility in the context of leadership. Leadership scholars should empirically examine whether leader-expressed humility does in fact foster greater learning, adaptiveness, and extraordinary performance (see Collins 2005, Vera and Rodriguez-Lopez 2004) or whether it means the difference between true and "pseudo"-transformational leadership (see Morris et al. 2005), propositions that have not yet been empirically tested. Future research should also examine boundary conditions for leader-expressed humility. For example, the level of leadership (first-line, middle management, executive management) or culture (Western versus Eastern) may influence the effectiveness of leader-expressed humility.

We also propose that future research test how expressed humility might interact with the closely related constructs presented in Table 1. We expect, for example, that expressed humility may have a tempering or buffering influence on LGO, CSE, and openness to experience that will enhance the utility of these constructs within organizational contexts. Driven by intrinsic curiosity (openness to experience), favorable views toward task persistence (LGO), or an unrealistically high sense of control over outcomes (internal locus of control), these otherwise positive characteristics could lead to undue persistence in failing causes or in tasks one has little chance of accomplishing. Expressed humility may help buffer extreme or maladaptive levels of these constructs to avoid such ineffective path persistence. That is, a willingness to view oneself accurately (including limitations) and an openness to receiving feedback from others may help temper these characteristics, adding more accuracy to self-efficacy, more realism to perceptions of control, and more purpose or grounding to openness to experience. Thus, we recommend that future research



examine interactions between expressed humility and other predictors of individual and team-level outcomes.

One final point is especially important to make. The recent movements of positive psychology (Seligman and Csikszentmihalyi 2000) and positive organizational scholarship (Cameron et al. 2003) have spurred more attention and interest in virtues such as humility. However, studying virtues has a unique set of challenges. First, compared with many psychological constructs, virtues typically have rich historic roots in theological and philosophical literatures, often making it more difficult to gain consensus about how to operationalize these virtues. Additionally, because virtues generally have greater moral underpinnings than many personality traits, accessing these constructs through self-report becomes more challenging (see Allison et al. 1989). We hope that our work can serve as a template for further research on virtues within organizational contexts.

Conclusion

The scientific study of humility within organizations promises many exciting implications and new avenues of research. Tangney (2000, p. 80) suggested that the study of humility would be propelled forward significantly with "a clear and consistently articulated conceptualization of this rich construct and, in turn, by the development of theoretically informed measures of humility." Although scholars have argued for the importance of humility within leadership and organizational contexts, this research topic has been stymied because of a lack of consensus with definitions and the difficulty of measurement. We hope that the development and validation of this humility scale represent an important step forward in being able to examine the real impact of humility on important organizational processes and outcomes, and that this effort will spur more theory and research involving this "classical source of strength" (Tangney 2000, p. 70) within organizations.

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Endnotes

¹The constructs of modesty, narcissism, openness to experience, and honesty-humility were the most often mentioned in association with humility in our review of the literature. From our reading about how humility might fit into the organizational literature, we identified learning goal orientation and core self-evaluations as germane constructs with which to compare expressed humility.

²For example, "When my leader shows humility and is open to what others have to say it creates an environment of energy" and humble leaders "play to their [employees'] strengths and...create a passion that excites them about what they do" (Owens and Hekman 2012, p. 804).

³As a robustness check, we sought to assess this reverse mediation possibility. Because HLM requires a level 1 outcome, we conducted this robustness check with individual (level 1) perceptions of team LGO. Replicating the multilevel effects, we found that individual perceptions of team LGO mediated the relationship between leader-expressed humility and individuals' reported engagement; we found no evidence that individuals' engagement mediated the relationship between leader-expressed humility and individual perceptions of team LGO.

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Bradley P. Owens is an assistant professor in the School of Management at the State University of New York at Buffalo. He holds a Ph.D. in organizational behavior from the University of Washington. His current research focuses on leadership, identity, team processes, diversity, and work/life balance.

Michael D. Johnson is an associate professor of management and organization in the Foster School of Business at the University of Washington. He received his Ph.D. in organizational behavior and human resource management from Michigan State University. His research focuses primarily on groups and teams, identity, and affect.

Terence R. Mitchell received a bachelor's degree from Duke and an M.A. and Ph.D. from the University of Illinois in organizational psychology. With the University of Washington since 1969, he has published on the topics of motivation, leadership, turnover, and decision making. A fellow of the Academy of Management (AoM) and the Society for Industrial and Organizational Psychology (SIOP), he has received the Lifetime Achievement Award from both SIOP and the AoM's Organizational Behavior division.

CORRECTION

In this article, "Expressed Humility in Organizations: Implications for Performance, Teams, and Leadership" by Bradley P. Owens, Michael D. Johnson, and Terence R. Mitchell (first published in *Articles in Advance*, February 12, 2013, *Organization Science*, DOI:10.1287/orsc.1120.0795), we have corrected the text so that "Hypothesis 3" appears in lines 4 and 5 in the left-hand column of page 1531.

