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*Published in:*  
Journal of Occupational and Organizational Psychology

*DOI:*  
[10.1111/joop.12153](https://doi.org/10.1111/joop.12153)

**IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.**

*Document Version*  
Publisher's PDF, also known as Version of record

*Publication date:*  
2016

[Link to publication in University of Groningen/UMCG research database](#)

*Citation for published version (APA):*  
Mehmood, Q., Hamstra, M. R. W., Nawab, S., & Vriend, T. (2016). Authentic leadership and followers' in-role and extra-role performance: the mediating role of followers' learning goal orientation. *Journal of Occupational and Organizational Psychology*, 89(4), 877-883. <https://doi.org/10.1111/joop.12153>

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*Short research note*

## Authentic leadership and followers' in-role and extra-role performance: The mediating role of followers' learning goal orientation

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This study examined whether and why authentic leadership predicts followers' performance. We hypothesized that authentic leadership predicts followers' learning goal orientation (goal to develop and improve), which, in turn, predicts followers' in-role and (civic virtue) extra-role performance. A multilevel, multisource, time-lagged study, conducted in telecommunications companies in Pakistan, among 115 supervisors and 345 reports supported indirect relations between authentic leadership and (1) follower in-role and (2) extra-role performance (civic virtue) mediated by followers' learning goal orientation.

### Practitioner points

- Authentic leadership is considered to promote employees' developmental focus through authenticity on the part of the leader (e.g., being aware of one's strengths and weaknesses).
- We discuss and analyse authentic leadership as an approach that involves managers' modelling of a learning goal orientation to followers.
- Direct supervisors' authentic leadership was found to predict employees' in-role and extra-role (civic virtue) performance because it may model a focus on learning goals in followers.
- Hence, important organizational outcomes can be improved through authentic leadership.

Authentic leadership influences organizational outcomes because authentic leaders promote psychological capacities, positive climates, self-awareness, and followers' self-development (Gardner, Cogliser, Davis, & Dickens, 2011; Ilies, Morgeson, & Nahrgang, 2005). While prior studies tested psychological outcomes of authentic leadership (see Gardner *et al.*, 2011), mechanisms through which authentic leadership influences performance remain understudied. Working from the notion that authentic leadership behaviour models to followers a *learning goal orientation* (LGO) – motivational mindset driving individuals to aim at improving capabilities (e.g., Dweck, 1986) – we test whether

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followers' LGO explains the link between authentic leadership and follower performance.

*Authentic leadership* has been defined according to four components. First, self-awareness refers to realization, accurate assessment, and acceptance of one's own strengths and weaknesses, a tendency to seek feedback on, and desire to improve one's social interactions. Second, balanced processing of information refers to seeking input from others, listening to those who disagree, and not emphasizing one's own point of view at others' expense. Third, relational transparency implies openly sharing one's feelings, letting others know one's true self, and admitting mistakes. Fourth, internalized moral perspective entails that one's actions accord with one's values and implies not allowing oneself to be pressured by a group to act otherwise (Avolio & Gardner, 2005; Gardner, Avolio, Luthans, May, & Walumbwa, 2005; Ilies et al., 2005).

*Learning goal orientation* (LGO) is a mindset that moves individuals to improve their capabilities by gaining new skills (e.g., Dweck, 1986). That is, LGO employees focus on improving their skills, gaining competence, developing their capabilities, learning from their mistakes, and working towards task mastery. *Followers'* LGO is particularly relevant because authentic leadership is inherently about capacities and development of the *follower*. Previous research proposed *identification* as one overarching mechanism, as the characteristics of authentic leaders '...enable followers to connect with their leaders and the values, beliefs, goals, and activities that are identified with the leader over time...' (Avolio, Gardner, Walumbwa, Luthans, & May, 2004, p. 808). The mechanism we propose rests on a similar assumption: Authentic leaders' positive characteristics make them credible and valuable *role models* whose behaviours will be emulated (Ilies et al., 2005).

We identified several ways in which emulating an authentic leader would result in followers adopting an LGO. First, authentic leaders show awareness of their strengths and limitations and sincere desire to improve themselves and their interactions with others (self-awareness), implying that these leaders are focused on improving their weaknesses and on learning. Followers are then expected to emulate this learning and improving orientation. Second, authentic leaders show their true self, share their feelings, and are not afraid to admit mistakes (relational transparency) because mistakes are seen as an opportunity to improve. When emulated, this parallels LGO individuals' openness to learn from mistakes and their tendency to deliver sustained effort when facing failure. Third, authentic leaders seek input and listen to others (balanced processing), which stimulates openness to, and proactive seeking of, feedback in order to improve, directly linking to an LGO. Fourth, authentic leaders engage in goal pursuit that accords with their inner values (internalized moral perspective), which links to LGO because it reflects an internal standard of comparison, rather than (for example) an external one.

*Hypothesis 1:* Authentic leadership positively predicts followers' LGO.

LGO impacts how people approach achievement situations and the behaviour they exhibit in goal pursuit (Dweck, 1986). Because of this, employees' LGO may predict their *in-role performance* (Van Yperen, Blaga, & Postmes, 2014): those activities relevant to employees' formal job tasks/assignments (Borman & Motowidlo, 1993). LGO is associated with tendencies to (1) approach tasks with an intrinsic motivation, (2) deliver prolonged and sustained *effort* even when faced with setback or failure, and (3) choose challenging tasks enabling development of competence (Elliott & Dweck, 1988). In-role performance hinges on proficiency with which tasks are performed (Borman & Motowidlo, 1993), which LGO individuals are specifically focused on improving. Employees' LGO, therefore,

is expected to positively predict their in-role performance. Hence, considering Hypothesis 1:

*Hypothesis 2:* Authentic leadership indirectly, positively, predicts followers' in-role performance through followers' LGO.

We also suggest that LGO predicts civic virtue *extra-role performance*. Civic virtue refers to participation in, and concern about, the life of the company (Deluga, 1994; Podsakoff, MacKenzie, Moorman, & Fetter, 1990). Civic virtue involves engaging actively with organizational developments and improvement (e.g., keeping abreast of novel developments and seeking new information by behaviours such as reading newsletters, emails, and memos), which LGO individuals are motivated to carry out given that they explicitly seek to develop and improve, and that they tend to be more committed to their organization (Joo & Park, 2010). Employees' LGO, therefore, is expected to positively predict their civic virtue behaviour. Hence, considering Hypothesis 1:

*Hypothesis 3:* Authentic leadership indirectly, positively, predicts followers' civic virtue extra-role performance through followers' LGO.

## Method

### *Participants and procedure*

The sample included 345 Pakistani telecommunication sector employees (34% female; aged between 20 and 60 years,  $M = 35.51$ ,  $SD = 10.89$ , between 1 and 12 years of tenure,  $M = 6.76$ ,  $SD = 2.73$ ), working with 115 supervisors (29% female). Between two and four subordinates ( $M = 3.00$ ,  $SD = 0.73$ ) for each supervisor completed the study. Data of authentic leadership (subordinate-rated), employees' LGO (subordinate-rated), employees' extra-role performance (supervisor-rated), and employees' in-role performance (supervisor-rated) were collected at four separate times, in the order presented above, with 2 weeks between each measurement.

### *Measures*

Authentic leadership was measured ( $\alpha = .72$ ) with the sixteen-item four-dimensional scale developed by Walumbwa, Avolio, Gardner, Wernsing, and Peterson (2008). Response options ranged from 1 (*not at all*) to 5 (*frequently, if not always*). Confirmatory factor analysis suggested that a second-order model (following the theory) approached acceptable fit levels,  $\chi^2(100) = 343.3$ ,  $p < .001$ , CFI = .903, TLI = .883, GFI = .905, RMSEA = .084 (90% CI = .074–.094)]. This model fit better than a one-factor model,  $\chi^2(104) = 1,666$ ,  $p < .001$ , CFI = .377, TLI = .281, GFI = .670, RMSEA = .209 (90% CI = .200–.218)], and a first-order four-factor model,  $\chi^2(104) = 484.35$ ,  $p < .001$ , CFI = .848, TLI = .825, GFI = .874, RMSEA = .103 (90% CI = .094–.112)].

Learning goal orientation ( $\alpha = .79$ ) was assessed with eight items developed by Button, Mathieu, and Zajac (1996). Response options ranged from 1 (*strongly disagree*) to 5 (*strongly agree*).

Extra-role performance/civic virtue was measured with four items ( $\alpha = .70$ ) by Podsakoff *et al.* (1990).

In-role performance was measured with four items ( $\alpha = .71$ ) developed by Van Dyne and LePine (1998); response options for in-role and extra-role performance ranged from 1 (*never*) to 5 (*always*).

**Table 1.** Descriptive statistics and intercorrelations

	M	SD	1	2	3	4	5	6	7
1. Gender	1.34	0.47	–	–.07	–.04	.04	–.09	.03	–.05
2. Age	35.51	10.89	–.08	–	.47***	.01	–.19*	.03	–.02
3. Tenure	6.76	2.73	–.06	.45***	–	.11	–.02	.15	–.13
4. Authentic Leadership	4.00	1.02	.04	.06	.05	(.82)	.31**	.22*	.13
5. Learning Goal Orient.	3.52	0.86	–.05	–.09	.01	.28***	(.79)	.18 <sup>†</sup>	.14
6. In-role Perf.	3.85	0.74	.00	–.01	.00	.14**	.16**	(.71)	.41***
7. Extra-role Perf.	3.60	0.90	–.05	.00	–.07	.14**	.15**	.36***	(.70)

Notes. Gender dummy coded, 1 = male, 2 = female. Level 1 correlations below the diagonal ( $N = 345$ ). Level 2 correlations above the diagonal ( $N = 115$ ). Cronbach's alphas between parentheses on the diagonal. <sup>†</sup> $p < .10$ ; \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

## Results

We used Mplus 7.31 (Muthén & Muthén, Los Angeles, CA, USA) to test our hypotheses in a multilevel SEM path model (Preacher, Zyphur, & Zhang, 2010) in which we separated within- and between-level components of our (indirect) effects (Tables 1 and 2). Separating the within- and between-level components was warranted by the relatively high intraclass correlations for authentic leadership ( $ICC1 = .66$ ),<sup>1</sup> LGO ( $ICC1 = .44$ ) and in-role performance ( $ICC1 = .12$ ). We considered the within-level (indirect) components as a test of our hypotheses – mainly because the dependent variables are conceptually at the individual level and show a strong individual component – and specifically employed a Monte Carlo method of estimating confidence intervals to assess the two mediation hypotheses (Selig & Preacher, 2008).

First, authentic leadership predicted LGO,  $\gamma = .38$ ,  $p < .01$ , providing support for Hypothesis 1. Second, results indicated that LGO predicted in-role performance,  $\gamma = .14$ ,  $p < .05$ , and extra-role performance,  $\gamma = .18$ ,  $p < .05$ . Furthermore, Monte Carlo estimations of confidence intervals revealed an indirect relation between authentic leadership and in-role performance, mediated by LGO,  $\gamma = .05$ ,  $p < .05$  (95% CI = .00–.13), providing support for Hypothesis 2, and an indirect relation between authentic leadership and extra-role performance, mediated by LGO,  $\gamma = .07$ ,  $p < .05$  (95% CI = .01–.17), providing support for Hypothesis 3. As Table 2 shows, analyses controlled for demographic variables (see Appendix S1).

## Discussion

The current research examined whether and why authentic leadership may be related to follower in-role and extra-role (civic virtue) performance. To that end, we conducted a study in which we measured the variables at different time points and using different sources. As expected, we found that authentic leadership predicted follower performance outcomes indirectly, through followers' adoption of an LGO.

<sup>1</sup> The multi-item  $r_{wg}$  value for authentic leadership assuming a uniform null distribution is .51, which indicates moderate agreement.

**Table 2.** Unstandardized multilevel SEM path model coefficients

Variable	Learning goal orientation	In-role performance	Extra-role performance
Constant	13.42 (9.323)	-0.14 (18.01)	3.11 (14.61)
Employee Gender	-0.05 (0.08)	0.02 (0.09)	-0.09 (0.10)
Employee Age	-0.00 (0.01)	-0.00 (0.01)	0.00 (0.01)
Employee Tenure	0.01 (0.02)	-0.00 (0.02)	-0.04 <sup>†</sup> (0.02)
Authentic Leadership	0.38** (0.11)	0.14 (0.10)	0.32* (0.15)
Learning Goal Orientation		0.14* (0.07)	0.18* (0.09)
Residual Variance (Subordinate)	0.39*** (0.04)	0.46*** (0.05)	0.73*** (0.07)
Residual Variance (Supervisor)	0.08 (0.21)	0.04 (0.08)	0.03 (0.04)
R <sup>2</sup> -within	.07 <sup>†</sup> (.04)	.03 (.02)	.06* (.03)
R <sup>2</sup> -between	.74 (.66)	.45 (1.08)	.11 (.54)
Indirect effects			
Path	Estimate (LLCI; ULCI)		
Authentic Leadership > Learning Goal Orientation > In-Role Performance	0.05* (0.00; 0.13)		
Authentic Leadership > Learning Goal Orientation > Extra-role Performance	0.07* (0.01; 0.17)		

Notes.  $N = 345$ . Standard errors between parentheses. <sup>†</sup> $p < .10$ ; \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ . LLCI, Lower level confidence interval; ULCI, Upper level confidence interval.

A novel insight provided by this research is that LGO plays a role in the authentic leadership process. Perhaps this is not surprising given that authentic leadership is about reference to the true self, admitting and learning from mistakes, and focusing on development (Avolio & Gardner, 2005), all of which arguably promote an orientation to learn. Hence, LGO may constitute a central underlying mechanism in the outcomes of authentic leadership, as supported by its role in predicting performance in the current study.

Using a time-lagged study with multiple subordinates of each supervisor and supervisors rating their subordinates' performance lends credence to the validity and reliability of the findings. The measurements were not conducted at the same time, because this would risk inflated relationships due to common source bias (this also applies to the two measured dependent variables, which could bias each other). Furthermore, followers' in-role and extra-role performance were rated by their supervisor. While we chose a time lag of 2 weeks, one may note that length of time lag can affect the size of an observed relationship (Dormann & Griffin, 2015). A limitation is that we cannot draw conclusions regarding causal roles of any of the variables or the causal order. It could be the case, for instance, that individuals with LGOs are somehow more 'drawn' to authentic leaders – although this does not seem a plausible alternative explanation when the level of authentic leadership predicts followers' performance through their LGO.

A number of future research directions derive from this study. Research on LGO indicates that individuals who endorse these goals are open to learning from their mistakes, exhibit more ethical behaviours, put lot of effort towards mastering a skill or concept, and are open to feedback about their weaknesses (Elliott & Dweck, 1988). It

seems plausible, accordingly, that *leaders'* LGO predicts part of their authentic leadership behaviour. Another point for further research is the inclusion of other types of goal orientation such as performance goals. For instance, it might be possible that authentic leadership reduces performance goal orientations, but our research did not seek to examine this possibility. Also, it is possible that the context of our study (telecommunications) is relevant to the results, in that work in more technologically oriented fields might benefit more from LGO and, accordingly, from authentic leadership.

Supplemental analyses indicated (see Appendix S1) that the effect was solely driven by self-awareness. Combined with the less than ideal CFA results for a one-factor solution, and the low  $r_{wg}$  value for authentic leadership, this result indicates that (1) replication studies would be valuable and (2) future research needs to seriously consider the conceptualization and operationalization of authentic leadership. Moreover, it is of importance to further examine whether and, if so, through which (potentially different) mechanisms, different components of authentic leadership predict outcomes.

We found evidence that authentic leadership predicts followers' in-role performance and civic virtue extra-role performance through followers' LGO. Follower-centric leadership has gained popularity due to psychological benefits of having a nonauthoritarian leader. However, practitioners and researchers alike might have lingering doubts about the utility of such approaches in terms of performance. Therefore, it is important to show, as this study did, that these forms of leadership do benefit performance.

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Received 19 October 2015; revised version received 30 June 2016

### Supporting Information

The following supporting information may be found in the online edition of the article:

**Appendix S1.** Supplementary analyses.

**Table S1.** Descriptive statistics and intercorrelations for supplementary analysis.

**Table S2.** Unstandardized multilevel SEM path model coefficients.