Received 20 December 2019
Revised 26 June 2020
5 November 2020
Accepted 5 November 2020

On the motivational nature of authentic leadership practices: a latent profile analysis based on self-determination theory

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Abstract

Purpose – Although one of the central premises of authentic leadership theory is that authentic leaders mobilize their followers, the underlying motivational mechanisms of this process remain poorly understood. Drawing on self-determination theory, this study aims to fill that gap by examining authentic leadership practices (ALP) as theoretical antecedents of employees' motivation profiles.

Design/methodology/approach – Latent profile analyses conducted on a sample of 501 employees revealed four profiles: self-determined, unmotivated, highly motivated and moderately motivated.

Findings – ALP were associated with a higher likelihood of membership into the most adaptive motivation profiles. Employees in these profiles displayed more optimal job functioning: higher organizational commitment and performance, and lower intentions to leave their organization.

Originality/value – These findings underscore the predictive power of autonomous motivation for employee functioning and provide new insights into how ALP can improve work motivation, and hence job functioning. Our results account not only for how ALP affects the complete range of behavioral regulations at work but also the different patterns in which these regulations combine within employees.

Keywords Motivation, Authentic leadership, Person-centered approach

Paper type Research paper

Authentic leadership (AL) theory (Luthans and Avolio, 2003) proposes that certain leadership behaviors and practices help followers to develop a higher quality of work motivation (Ilies *et al.*, 2005). These behaviors encompass leaders' self-awareness (understanding of oneself and one's impact on others), relational transparency (honest presentation of one's authentic self to others), internalized moral perspective (practices guided by core personal values and moral standards) and balanced processing of information (objectively analyzing relevant data in the decision-making process). However, the mechanisms underlying the motivating

This work was supported by the financial support of the Fonds de recherche du Québec – Société et culture (FRQSC), the UQTR Research Chair on Motivation and Occupational Health and the Research Group on Health and Wellness at Work. The third author was also supported by a grant from the Social Science and Humanity Research Council of Canada (435-2018-0368) in the preparation of this manuscript.

Leadership & Organization Development Journal
Vol. 42 No. 2, 2021
pp. 178-194

0143-7739
DOI 10.1108/LODJ-12-2019-0522

role of authentic leadership practices (ALP; Ilies *et al.*, 2005) remain poorly understood. In the present study, we investigate this issue from the perspective of self-determination theory (SDT; Ryan and Deci, 2017).

Self-determination theory

SDT (Ryan and Deci, 2017) proposes that employees are driven by different types of regulations that differ along a continuum of self-determination. They may invest efforts at work for the pleasure and satisfaction of doing so (intrinsic motivation), to achieve personal or professional goals that they valued (identified regulation), to build or maintain their self-esteem or avoid unpleasant feelings (introjected regulation), or to obtain rewards or avoid negative consequences (external regulation). An extensive body of research has shown these regulations mechanisms to be involved in a variety of individual (e.g. burnout, commitment) and organizational (e.g. absenteeism, performance) outcomes (e.g. Deci *et al.*, 2017; Fernet *et al.*, 2015). However, most SDT-based studies are *variable-centered*, and thus have failed to consider the combined effects of different types of behavioral regulations on employee functioning. In contrast, a *person-centered approach* focuses on subpopulations (or profiles) of employees characterized by distinct configurations of regulations which may relate differentially to work outcomes (Meyer and Morin, 2016). This alternative approach thus provides a way to achieve a complementary, and more comprehensive, understanding of employees' motivation (Howard *et al.*, 2016). Whereas studies have documented the role of motivation profiles in the prediction of employee functioning, theoretical and empirical gaps remain in our understanding of potential antecedents of these profiles, such as ALP.

A person-centered approach to work motivation

Although previous studies have focused on the identification of work motivation profiles, most of these studies have relied on cluster analyses which are (1) sensitive to variables' distributions and clustering algorithms, (2) rely on strict assumptions about the exact (non-probabilistic) assignment of cases to profiles and (3) require two-step procedures to test the associations between profiles, predictors and outcomes (Meyer and Morin, 2016). In contrast, latent profile analysis (LPA) is a model-based approach that effectively addresses these limitations (Meyer and Morin, 2016). To date, three studies, summarized in Table 1, have relied on LPA to study work motivation profiles.

First, Graves *et al.* (2015) identified six motivational profiles ($N = 321$) and showed that managers who reported receiving low support from their supervisor and being exposed to high organizational politics were more likely to belong to a less desirable profile. In contrast, Howard *et al.* (2016) identified a four-solution profile in two samples, and noted employees who presented greater likelihood of belonging into an *amotivated* profile were characterized by the lowest work performance and well-being. Finally, Gillet *et al.* (2017) also identified a four-solution motivation profiles among two samples. The profiles characterized by the highest levels of autonomous motivation were associated with the most desirable outcomes (positive affect and work engagement) and with the highest levels of perceived organizational support and communication, whereas those characterized by low to moderate levels of autonomous motivation were associated with more negative outcomes (negative affect).

Based on the rarity of previous studies, we leave as an open research question the specific number of profiles, and the nature of these profiles, which will be observed in the present study. However, based on these empirical findings, we expect that the best solution will include between 4 and 6 profiles which will differ from one another both in terms of their overall level of motivation (high, moderate, low) and configuration (intrinsic, identified, introjected, external).

Profiles	Graves *et al.* (2015)		Howard *et al.* (2016)		Gillet *et al.* (2017)	
1	Very low internal	Very low intrinsic, identified and introjected; average external	Amotivated	Very high amotivation; average to low on all other regulations	Low	Low on all regulations
2	Low internal	Low intrinsic, identified and introjected regulations; average external	Moderately autonomous	Low to very low amotivation, external, and introjected; moderately high intrinsic and identified	Self-determined	Moderate to high intrinsic and identified; low introjected and external
3	Moderately low internal	Moderately low intrinsic, identified and introjected; average external	Highly motivated	Low amotivation; moderately high external and introjected; very high identified and intrinsic	Mixed	High intrinsic, identified and introjected; low external
4	Moderately high	Moderately high on all regulations	Balanced	Average on all regulations	Moderate	Moderate on all regulations
5	High internal	High intrinsic, identified and introjected; average external				
6	Self-determined	High intrinsic and identified, moderately low introjected, and low external				

Table 1.
Work motivation profiles

The role of ALP as a predictor of motivation profiles

Although some of studies described above have considered managerial characteristics as predictors of work motivation profiles, none has considered the role of AL. AL refers to "a pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate" (Walumbwa *et al.*, 2008, p. 94). Authentic leaders inspire followers to engage in their job and professional relationships with the autonomy and sense of ownership that characterize internalized motivation (Ilies *et al.*, 2005). In motivational terms, ALP should foster more adaptive motivation profiles as they support employees' autonomy through the provision of non-controlling positive feedback and by acknowledging their personal perspective (Ilies *et al.*, 2005). This is because ALP should facilitate the internalization process (or the acquisition and acceptance of values and goals) that results in employees becoming more autonomously (and less controllingly) motivated to engage in behaviors that express these values and goals (Ryan, 1995).

To our knowledge, only two variable-centered studies have investigated the impact of AL on motivation. Leroy *et al.* (2015) showed that AL tended to satisfy the needs for autonomy, competence and relatedness at work, proposed by SDT as the foundation of autonomous

motivation. Guerrero *et al.* (2015) examined the motivational effect of board chairs' AL on nonexecutives sitting on the boards of a Canadian credit union. They found positive relations between chairs' AL and nonexecutives' motivation and commitment, partially mediated by the board's participative safety climate. Unfortunately, this study failed to consider the full range of behavioral regulations proposed by SDT and was limited to a specific context (executive boards). The present study addresses these limitations by focusing on the relations between ALP and motivation profiles within a more "typical" sample. Based on AL theory and of these limited prior empirical results, we propose the following hypothesis:

Hypothesis 1 (H1). Employees who perceive their immediate superior as authentic will be more likely to present motivation profiles characterized by higher levels of autonomous forms of motivation.

Job functioning outcomes of motivation profiles

Previous person-centered studies of work motivation have underscored the importance of autonomous motivation for employee functioning. For example, Graves *et al.* (2015) found that managers with a profile characterized by high autonomous motivation presented higher job satisfaction and organizational commitment, whereas those with profiles characterized by low autonomous motivation were at risk of turnover. However, additional results bring nuance regarding the combined effects of autonomous and controlled forms of motivation. For example, Howard *et al.* (2016) revealed that employees corresponding to profiles characterized by high autonomous and controlled motivation displayed higher work performance, engagement and satisfaction, and lower burnout. These results suggested that controlled motivation may not undermine functioning as long as autonomous motivation remains equally high. This is because self-motivation tends to provide advantages when behavioral regulations are congruent with personal values (Ryan and Deci, 2017).

Accordingly, we expect motivation profiles to be differently associated with a range of with a range of important attitudinal (organizational commitment, job satisfaction, turnover intentions), affective (work engagement), and behavioral (in-role performance) indicators of job functioning (Demerouti and Cropanzanno, 2010). Organizational commitment reflects an employee's affective attachment to the organization that is important to job performance (Leroy *et al.*, 2015). Another essential factor to organizational effectiveness (Jalagat, 2016) is job satisfaction, which is related to organizational commitment and lower turnover intentions (Yang, 2010). Turnover intentions refer to the conscious willfulness of an employee to leave the organization (Tett and Meyer, 1993). It is recognized as the most important predictors of actual turnover (Meyer *et al.*, 2002). Work engagement is a positive, fulfilling work-related state of mind (Schaufeli *et al.*, 2006) that has been associated with job performance and lower turnover intentions (Yalabik *et al.*, 2013). Finally, in-role performance refers to work behaviors required by the job (Williams and Anderson, 1991) that are important to organizational performance (Salminen *et al.*, 2017). Based on the aforementioned theoretical and empirical considerations, we propose that:

Hypothesis 2a (H2a). Profiles characterized by higher levels of autonomous forms of motivation will be associated with the most desirable work outcomes (higher commitment, satisfaction, engagement, in-role performance, coupled with lower turnover intentions) irrespective of their levels of controlled motivation.

Hypothesis 2b (H2b). Profiles dominated by controlled motivation will be associated with the less desirable outcome (lower commitment, satisfaction, engagement and in-role performance, coupled with higher turnover intentions)

Method

Participants and procedures

Participants were recruited in the manufacturing (61%) and services (39%) sectors. An electronic link was sent to all employees ($N = 647$) from consenting organizations, which invited them to complete an online consent form and questionnaire. The sample included 501 French-Canadian employees (51.6% women) with an average age of 41.45 years (SD = 14.07) and work experience of 10.57 years (SD = 9.48).

Measures

Means, standard deviations and correlations are presented in Table 2.

Work motivation. The 16-item Multidimensional Work Motivation Scale (Gagné *et al.*, 2015) assessed why employees put effort into their current job on a scale ranging from 1 (*not at all for this reason*) to 7 (*exactly for this reason*). Four types of motivation were assessed: intrinsic motivation ($\alpha = 0.91$; *Because my work is stimulating*), identified regulation ($\alpha = 0.75$; *Because this job has personal significance for me*), introjected regulation ($\alpha = 0.63$; *Because otherwise, I would be ashamed of myself*), and external regulation ($\alpha = 0.77$; *To get others' approval*).

Authentic leadership. The 14-item Authentic Leadership-Integrated Questionnaire (Levesque-Côté *et al.*, 2018) rated employee's perceptions of their leader's AL on a scale ranging from 1 (*never*) to 5 (*almost always*). This scale comprises four subscales which can be combined in a global measure ($\alpha = 0.90$): self-awareness ($\alpha = 0.82$; *My leader describes precisely how others view his/her abilities*), relational transparency ($\alpha = 0.80$; *My leader openly expresses his/her thoughts*), internalized moral perspective ($\alpha = 0.71$; *My leader bases his/her decisions on his/her fundamental values*) and balanced processing ($\alpha = 0.77$; *My leader asks for ideas that challenge his/her core beliefs*).

Organizational commitment. The affective six-item subscale of Meyer and Allen (1991) was used to assess affective organizational commitment. Items (*I feel emotionally attached to my organization*) were measured on a scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) ($\alpha = 0.75$).

Work performance. A four-item in-role performance subscale (Williams and Anderson, 1991) was used to measure work performance. Items (*I adequately complete the tasks that are assigned to me*) were measured on a scale ranging from 1 (*do not agree at all*) to 7 (*very strongly agree*) ($\alpha = 0.94$).

Job satisfaction. A six-item scale (Fouquereau and Rioux, 2002) was used to measure the extent to which participants were satisfied at work. Items (*I am satisfied with my work*) were measured on a scale ranging from 1 (*do not agree at all*) to 7 (*completely agree*) ($\alpha = 0.89$).

Work engagement. The three-item vigor subscale of the Utrecht Work Engagement Scale (Schaufeli *et al.*, 2006) was used to measure work engagement. Items (*When I get up in the morning, I feel like going to work*) were measured on a scale ranging from 1 (*never*) to 7 (*everyday*) ($\alpha = 0.90$).

Intentions to quit. One item adapted from O'Driscoll and Beehr (1994) rated participants' agreement with the item (*I think about leaving my organization*) on a scale ranging from 1 (*do not agree at all*) to 7 (*very strongly agree*).

Analyses

Using Mplus 7.3 (Muthén and Muthén, 2015) robust maximum likelihood (MLR), we examined models including 1 to 7 profiles in which the means and variances of the profile indicators were freely estimated (Peugh and Fan, 2013). Models were estimated using 3,000 random start values, 100 iterations, and 100 final optimizations (Hipp and Bauer, 2006). All models converged on a replicated solution.

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. AL	3.63	0.74	*0.90*													
2. SA	3.41	0.88	0.892**	*0.82*												
3. RT	3.91	0.77	0.758**	0.611**	*0.80*											
4. BP	3.64	0.88	0.848**	0.685**	0.529**	*0.77*										
5. MP	3.63	0.95	0.835**	0.659**	0.546**	0.559**	*0.71*									
6. IM	5.06	1.47	0.378**	0.333**	0.308**	0.310**	0.313**	*0.91*								
7. ID	4.58	1.43	0.310**	0.292**	0.206**	0.275**	0.254**	0.756**	*0.75*							
8. IJ	4.20	1.31	0.220**	0.188**	0.116**	0.194**	0.216**	0.349**	0.519**	*0.64*						
9. EX	2.91	1.26	0.162**	0.166**	0.075	0.129**	0.156**	−0.176**	−0.049	0.248**	*0.77*					
10. OC	3.59	0.87	0.441**	0.394**	0.368**	0.371**	0.334**	0.542**	0.500**	0.277**	−0.103*	*0.75*				
11. IRP	6.20	0.83	0.182**	0.103*	0.230**	0.128**	0.177**	0.275**	0.220**	0.156**	−0.050	0.137**	*0.94*			
12. JS	4.63	1.33	0.440**	0.383**	0.399**	0.377**	0.326**	0.694**	0.593**	0.246**	−0.214**	0.673**	0.255**	*0.89*		
13. WE	4.33	1.40	0.252**	0.194*	0.230**	0.227**	0.189**	0.592**	0.527**	0.219**	−0.306**	0.534**	0.284**	0.639**	*0.90*	
14. IQ	1.89	1.53	−0.299**	−0.297**	−0.254**	−0.200**	−0.261**	−0.378**	−0.307**	−0.052	0.177**	−0.424**	−0.102**	−0.435**	0.306**	NA

Note(s): Reliability estimates for scales are presented in italic on the diagonal. AL, Authentic leadership; SA, Self-Awareness; RT, Relational transparency; BP, Balanced processing of information; MP, Internalized moral perspective; IM, Intrinsic motivation; ID, Identified regulation; IJ, Introjected regulation; Ex, External regulation; ON, Organizational commitment; I-Rp, In-role performance; JS, Job satisfaction; WE, Work engagement; IQ, Intention to quit; $^{*}p < 0.05$; $^{**}p < 0.01$; SD = Standard deviation

Table 2.
Correlations and descriptive statistics

In addition to considering the substantive meaning and theoretical conformity of each solution, we considered the following indicators to guide the selection of the optimal solution: Akaïke information criterion (AIC), consistent AIC (CAIC), Bayesian information criterion (BIC) and sample-size adjusted BIC (ABIC). Lower values on these indicators reflect a higher level of model fit. The Lo *et al.* (2001) (LMR) and the bootstrap (BLRT) likelihood ratio tests compare a target solution with one including one fewer profile. Significant tests suggest that the target solution can be retained. Simulation studies indicate that the CAIC, BIC, ABIC and BLRT are particularly effective, but that the AIC and LMR should not be used (Diallo *et al.*, 2016, 2017); these indicators are only reported to ensure a complete disclosure. The entropy will also be reported as an indicator of the quality of the classification of individuals into the extracted profiles, where values closer to 1 indicate better classification.

The predictor and outcomes will be added to the final LPA solution via a direct multinomial logistic regression link function predicting profile membership. The relations between profile membership and the outcomes will be tested using the AUXILIARY (*BCH*) function (Bakk and Vermunt, 2016).

Results

Motivation profiles

The results of the alternative LPA solutions are reported in Table 3. The ABIC and BLRT support a six-profile solution, whereas the CAIC and BIC support a five-profile solution. A recent study (Diallo *et al.*, 2017) suggests that when the entropy values are high (as here, ranging from 0.767 to 0.808), the choice should preferably focus on the CAIC and BIC. We thus considered parameter estimates associated with the five-profile solution and with the adjacent four- and six-profile solutions. This showed the four-profile solution to result in well-differentiated and meaningful profiles, whereas adding profiles resulted in the estimation of similar profiles differing quantitatively and bringing no added-value (Morin and Marsh, 2015). The four-profile solution was retained (see Figure 1) and resulted in a high level of classification accuracy (entropy = 0.789; average probability of class membership = 0.852–0.918; low cross-probabilities $\leq$ 0.001 to 0.096; see Table 4). Detailed results are reported in Table 5.

Profile 1 characterizes *self-determined* employees presenting very high levels of intrinsic motivation, high levels of identified regulation, low levels of introjected regulation, and very low levels of external regulation. Profile 2 characterizes *unmotivated* employees with very low levels of intrinsic motivation and identified regulation, low levels of introjected regulation, and average levels of external regulation. Profile 3 characterizes *highly motivated* employees, presenting very high to high levels of each regulation. Finally, Profile 4 characterizes *moderately motivated* employees, presenting with average levels of each regulation.

Authentic leadership as a predictor

The relations between global levels of AL and profile membership are reported in Table 6. Employees who perceive their immediate superior as more authentic are more likely to belong to the *highly motivated* profile than to the *unmotivated* and *moderately motivated* profiles, and into the *self-determined* and *moderately motivated* profiles relative to the *unmotivated* one (supporting H1). To more systematically investigate whether results would differ as a function of AL dimensions, these analyses were also realized using AL subscales. These results are reported in grayscale in Table 6. Despite slight differences in statistical significance, these results closely parallel those obtained for global AL scores, supporting our decision to consider these relations at the global level. Among the few differences, internalized moral perspective did not differentially predict membership into the

	Log likelihood	Free parameters	Scaling	AIC	CAIC	BIC	ABIC	Entropy	LMR	BLRT
1 profile	−3512.968	8	0.905	7041.936	7083.780	7075.780	7050.780	–	–	–
2 profiles	−3277.285	17	0.984	6588.569	6677.487	6660.487	6606.527	0.794	<0.01	<0.01
3 profiles	−3197.404	26	1.160	6446.809	6582.801	6556.801	6474.274	0.767	0.037	<0.01
4 profiles	−3141.383	35	1.160	6352.765	6535.832	6500.832	6389.738	0.789	0.105	<0.01
5 profiles	−3104.967	44	1.225	6297.934	6528.075	6484.075	6344.414	0.808	0.369	<0.01
6 profiles	−3078.289	53	1.607	6262.577	6539.793	6486.793	6318.564	0.803	0.851	<0.01
7 profiles	−3070.091	62	1.214	6264.182	6588.472	6526.472	6329.676	0.800	0.244	1.000

Note(s): AIC, Akaike Information Criterion; CAIC, Constant AIC; BIC, Bayesian Information criterion; ABIC, sample size adjusted BIC; LMR, *p* value associated with the adjusted Lo-Mendell-Rubin likelihood ratio test; BLRT, *p* value associated with the bootstrap likelihood ratio test

Table 3.
Results from the profile enumeration process

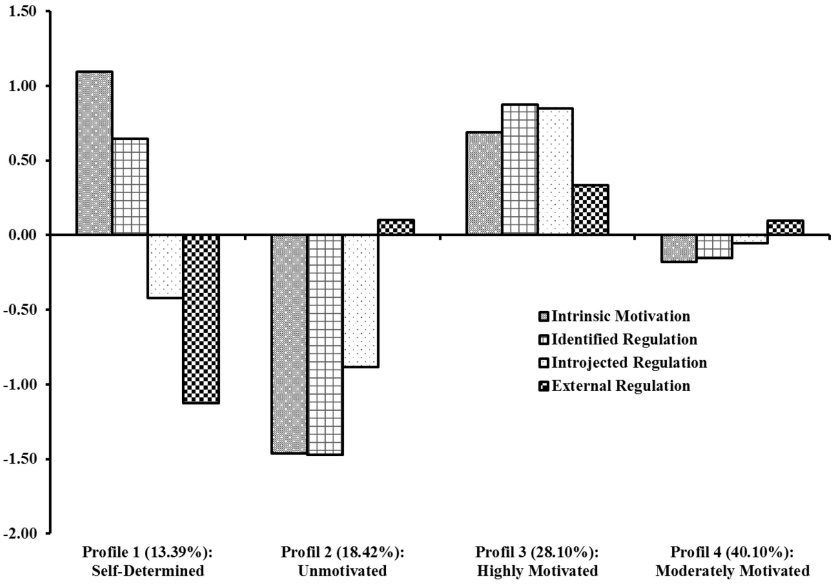

Figure 1.
Final four-profile solution

Note(s): The results were standardized to help in the interpretation of this histogram

Table 4.
Posterior classification probabilities for the most likely latent profile membership (row) by latent profile (column)

	Profile 1	Profile 2	Profile 3	Profile 4
Profile 1	0.880	0.000	0.092	0.027
Profile 2	0.001	0.918	0.000	0.081
Profile 3	0.051	0.000	0.852	0.096
Profile 4	0.013	0.050	0.059	0.878

Note(s): Profile 1: Self-Determined; Profile 2: Unmotivated; Profile 3: Highly Motivated; Profile 4: Moderately Motivated

self-determined and *unmotivated* profiles relative to the *moderately motivated* one, and relational transparency did not differentially predict membership into the *unmotivated* profile relative to the *moderately motivated* one.

Work outcomes

The mean outcome levels in each profile are illustrated in Figure 2 and detailed results are reported in Table 7. Organizational commitment levels are higher in the *self-determined* and *highly motivated* profiles, followed by the *moderately motivated* profile, and then by the *unmotivated* profile. In-role performance levels are highest in the *self-determined* and *highly motivated* profiles, followed equally by the *unmotivated* and *moderately motivated* profiles. Work engagement and job satisfaction levels are higher in the *self-determined* profile, followed by the *highly motivated*, then by the *moderately motivated* profile and lastly by the *unmotivated* profile, with all pairwise comparisons being statistically significant. Finally, intentions to quit are lowest in the *self-determined* and *highly motivated* profiles, followed by

	Profile 1 Self-determined		Profile 2 Unmotivated		Profile 3 Highly motivated		Profile 4 Moderately motivated	
	Mean [CI]	Variance [CI]	Mean [CI]	Variance [CI]	Mean [CI]	Variance [CI]	Mean [CI]	Variance [CI]
Intrinsic motivation	6.659 [6.487–6.831]	0.149 [0.078–0.220]	2.916 [2.152–3.680]	1.344 [0.958–1.730]	6.071 [5.642–6.500]	0.449 [0.288–0.610]	4.796 [4.359–5.233]	0.610 [0.453–0.767]
Identified regulation	5.495 [4.923–6.067]	1.635 [0.543–2.727]	2.483 [2.018–2.948]	0.548 [0.391–0.705]	5.831 [5.353–6.309]	0.468 [0.337–0.599]	4.362 [3.815–4.909]	0.526 [0.283–0.769]
Introjected regulation	3.651 [2.789–4.513]	1.545 [0.338–2.752]	3.039 [2.694–3.384]	1.130 [0.700–1.549]	5.313 [5.003–5.623]	0.784 [0.519–1.049]	4.126 [3.640–4.612]	1.103 [0.866–1.340]
External regulation	1.490 1.272–1.708]	0.235 [0.117–0.353]	3.044 [2.711–3.377]	1.732 [1.344–2.120]	3.325 [2.929–3.721]	1.758 [1.301–2.215]	3.025 [2.800–3.250]	1.038 [0.840–1.236]

Note(s): CI: 95% confidence interval

Table 5.
Detailed results from the final latent profile solution

	Profile 1 vs Profile 4 Coef. (SE)	OR	Profile 2 vs Profile 4 Coef. (SE)	OR	Profile 3 vs Profile 4 Coef. (SE)	OR
Authentic leadership	0.403 (0.390)	1.496	−0.688 (0.209)**	0.502	1.148 (0.306)**	3.151
Self-awareness	0.227 (0.348)	1.255	−0.472 (0.209)*	0.624	0.856 (220)**	2.354
Relational transparency	0.572 (0.310)	1.772	−0.308 (0.169)	0.735	0.702 (0.303)*	2.018
Intern. moral perspective	0.216 (0.497)	1.241	−0.476 (0.285)	0.621	1.002 (0.267)**	2.724
Balanced process. of information	0.304 (0.250)	1.355	−0.414 (0.150)**	0.661	0.985 (0.322)**	2.678
	Profile 1 vs Profile 3 Coef. (SE)	OR	Profile 2 vs Profile 3 Coef. (SE)	OR	Profile 1 vs Profile 2 Coef. (SE)	OR
Authentic leadership	−0.745 (0.529)	0.475	−1.836 (0.354)**	0.159	1.091 (0.384)**	2.977
Self-awareness	−0.629 (0.424)	0.533	−1.328 (0.286)**	0.265	0.698 (0.293)*	2.010
Relational transparency	−0.131 (0.470)	0.877	−1.010 (0.305)**	0.364	0.879 (0.339)**	2.408
Intern. moral perspective	−0.786 (0.617)	0.456	−1.477 (0.396)**	0.228	0.691 (0.366)	1.996
Balanced process of information	−0.681 (0.429)	0.506	−1.399 (0.332)**	0.247	0.718 (0.272)**	2.050

Table 6. Results from multinomial logistic regression for predictor variables on profile membership

Note(s): *$p < 0.05$, **$p < 0.01$; SE, Standard Error of the coefficient; OR, Odds Ratio; The coefficients and OR reflects the effects of the predictor on the likelihood of membership into the first listed profile relative to the second listed profile; Profile 1: Self-Determined; Profile 2: Unmotivated; Profile 3; Highly Motivated; Profile 4: Moderately Motivated

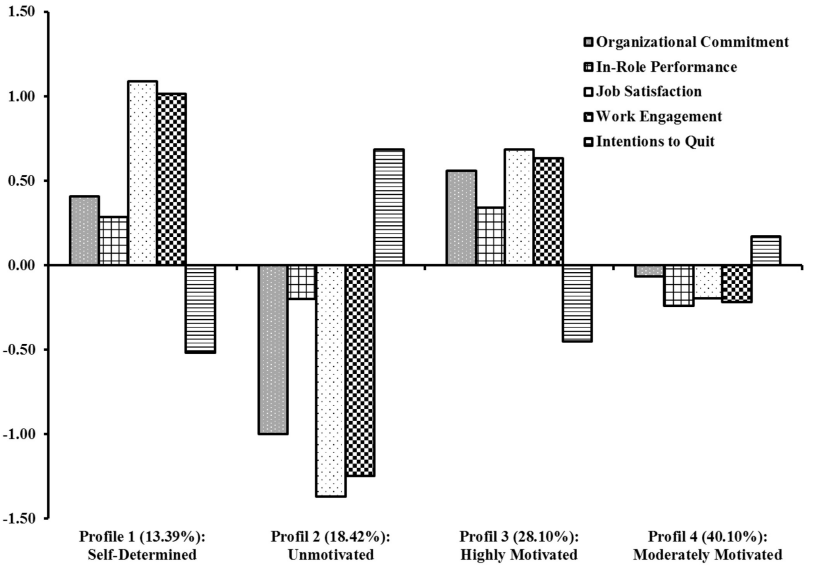

Figure 2. Graphical representation of outcomes levels in each profile

Note(s): The results were standardized to help in the interpretation of this histogram

Table 7.
Mean outcome levels [and confidence intervals] as a function of profile membership

Outcome	Profile 1 Self-determined Mean [CI]	Profile 2 Unmotivated Mean [CI]	Profile 3 Highly motivated Mean [CI]	Profile 4 Moderately motivated Mean [CI]	Summary of significant differences
Organizational commitment	3.974 [3.754–4.186]	2.660 [2.464–2.856]	4.110 [3.973–4.247]	3.527 [3.412–3.648]	1 = 3 > 4 > 2
In-role performance	6.459 [6.225–6.695]	6.017 [5.785–6.225]	6.509 [6.392–6.628]	5.978 [5.862–6.098]	1 = 3 > 2 = 4
Job satisfaction	5.919 [5.685–6.155]	3.014 [2.775–3.245]	5.436 [5.322–5.558]	4.396 [4.282–4.518]	1 > 3 > 4 > 2
Work engagement	5.504 [5.284–5.716]	2.889 [2.518–3.262]	5.062 [4.884–5.236]	4.079 [3.884–4.276]	1 > 3 > 4 > 2
Intentions to quit	1.246 [0.995–1.505]	2.744 [2.289–3.191]	1.325 [1.134–1.526]	2.101 [1.865–2.335]	1 = 3 < 4 < 2

Note(s): CI: 95% confidence interval

the *moderately motivated* profile and finally by the *unmotivated* profile. These results support Hypotheses 2a and 2b.

Discussion

Theoretical contribution

Authentic leadership. This study provides a clearer perspective on how ALP foster more adaptive motivation profiles. When employees perceive their supervisors as authentic, they are more likely to belong to highly motivated and self-determined profiles. If they do not fit either of these profiles, their positive ALP perceptions will reduce their likelihood of falling into the completely unmotivated profile. Furthermore, with few exceptions, relations occurring at the level of the specific AL facets matched those obtained for the global AL measure, highlighting the importance of all AL facets.

Among the few differences, the internalized moral perspective dimension mainly predicted membership into the highly motivated profile, suggesting that leaders who remain true to their core values while fulfilling their responsibilities may become models for their followers and promote personal identification with them (Avolio *et al.*, 2004). Thus, adopting an internalized moral perspective could inspire employees to invest efforts at work not uniquely by building interest or importance, but also by nurturing a sense of moral obligation to meet the leader's standards. Unlike self-determined employees, those corresponding to the highly motivated profile did not necessarily act in congruence with their personal values, which could reflect the fact that are less satisfied and engaged at work than their counterparts. As for relational transparency, it predicted membership into both profiles characterized by high levels of autonomous motivation relative to those reflecting lower levels of autonomous motivation but failed to differentially predict membership into these two profiles. Thus, leaders who disclose their true selves could help to generate a desire to invest efforts at work for the pleasure and satisfaction of doing so, and to achieve personal or professional goals.

These findings extend earlier research on the motivational mechanisms involved in AL, which has focused mainly on self-determined types of work regulation (Guerrero *et al.*, 2015) or needs satisfaction (Leroy *et al.*, 2015). Furthermore, they show not only how AL affects the complete range of work regulations, but also the different patterns in which these regulations combine within employees. Our results thus suggest that when employees see their leaders acting in congruence with their values, they are more inclined to follow suit. This would empower them to take ownership of their own motivation more autonomously (Leroy *et al.*, 2015).

Self-determination theory. This study makes three significant contributions to SDT. First, the focus on motivation profiles and work functioning allows us to specify that it is the *intensity* of high quality motivation that predicts favorable outcomes. For example, the highly motivated and self-determined profiles presented the strongest organizational commitment and performance and the weakest intentions to quit. Moreover, as proposed by Howard *et al.* (2016) and Gillet *et al.* (2017), whether introjected and external regulation are high or low, employees should function optimally when their autonomous motivation is higher than these regulations. Thus, when employees are driven by pleasure and interest, the fact that they also gain a sense of self-worth or social approval does not seem to affect their job attitudes (commitment and turnover intentions) and behaviors (performance), although it can somewhat limits their work engagement and satisfaction. This is consistent with SDT's eudemonic view of well-being suggesting that vitality and a deeper sense of satisfaction are more likely to result from a complete internalization process (Ryan and Deci, 2017).

Second, our results suggest that introjected regulation tend to covary with more autonomous types of regulation, rather than with external regulation. Although these results corroborate prior studies (Gillet *et al.*, 2017; Graves *et al.*, 2015; Howard *et al.*, 2016), they go against the traditional view of work motivation which typically bundles introjected regulation with external regulation. However, as shown here, introjected regulation appears to be more autonomous than controlled (Koestner and Losier, 2002).

Third, our study adds to our knowledge on predictors of motivation profiles. Past studies have either focused on unalterable individual characteristics (Howard *et al.*, 2016) or on isolated leadership components (Gillet *et al.*, 2017; Graves *et al.*, 2015). Our study extends these results by showing that AL could represent a potentially important, and modifiable, driver of work motivation (Ilies *et al.*, 2005). Not only do we confirm that leaders are ideally positioned to promote self-determination (Deci *et al.*, 2017), we also emphasize the need to unravel the role of different ALP.

Limitations

Certain limitations must be considered. First, we used a cross-sectional design. Multiple data collection points would provide stronger tests of the temporal stability of the profiles, and more precise tests of the directionality of the associations between ALP, the profiles, and the outcomes. Second, we relied exclusively on self-report measures, which carry of greater risk of being impacted by social desirability and self-report biases. Fortunately, as noted by Meyer and Morin (2016), shared method variance is unlikely to play a role in person-centered analyses due to their inherent multivariate nature. Yet, future studies should also incorporate objective measures or multi-source data, especially for work performance. Third, because we examined a convenience sample, future studies should test our results for generalizability to employees in a wider range of occupations, industries, and cultures.

Practical implications

Our results call for supervisors to strive toward more ALP to cultivate employee motivation. Providing supervisors with training as well as one-on-one coaching sessions that focus on the improvement of ALP could help them interiorize the importance of these practices. By being aware of who they are and what they stand for, acting in accordance with their personal values, relying on their true self, and soliciting and listening to all points of view, leaders can help employees develop high-quality motivation profiles. Because employees in the highly motivated and self-determined profiles were the most committed and performant and the least likely to leave, organizations would likely gain by promoting ALP. This objective can also be achieved by drawing attention to the meaningfulness of job tasks and by arranging opportunities for personal and professional development. Since our results highlight the importance of autonomous motivation for employees' optimal functioning, organizations would also benefit from relying on the meaning and pleasure associated with tasks rather than rewards and punishment to promote employee's motivation. Everyone stands to benefit from a healthy organizational environment that encourages ALP and provides open access to information, resources, support and opportunities for all concerned (Avolio and Gardner, 2005).

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