

Authentic Leadership and Proactive Work Behavior: Moderated Mediation Effects of Conscientiousness and Organizational Commitment

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This study examines the mediating role of organizational commitment in the relationship between authentic leadership and proactive work behavior. The study also investigates the moderating role of conscientiousness in those relationships. Using anonymous questionnaire survey, the data was collected from a sample comprised of 375 persons working in a large public university in the north of Thailand. The SPSS Program with PROCESS macro (Model 4 and Model 8) was used to test the hypotheses regarding the mediation and the moderated mediation effects. The bootstrap result for indirect effect organizational commitment ($\beta = .26$, $SE = .05$) was significant, indicating that organizational commitment mediated the relationship between authentic leadership and proactive work behavior (PWB). Moreover, the conditional indirect effects of authentic leadership on PWB (through organizational commitment) were significant at the low levels (1 *SD* below the mean; $\beta = .13$), average levels (at the mean; $\beta = .17$), and high levels (1 *SD* above the mean; $\beta = .21$) of conscientiousness. Thus, the direct and indirect effects of authentic leadership (through organizational commitment) on PWB are particularly strong for high levels as compared with low levels of conscientiousness. The findings offer implications regarding how authentic leadership can enhance PWB through organizational commitment.

Keywords: authentic leadership, proactive work behavior, organizational commitment, conscientiousness

Work environments nowadays are characterized by rapid and continuous changes. There is also pressure for innovation and decentralization that requires organizations to adapt their strategies and processes. Thus, organizations need to rely on employees who can proactively contribute to organizational effectiveness. That is, employees need to exhibit proactive work behavior (PWB) which is characterized by active, self-starting, and future-oriented actions that aim to change and improve the situations instead of reacting passively to them (Crant, 2000; Fay & Frese, 2001; Parker, Bindl, & Strauss, 2010). Such proactive behavior has been shown to lead to both positive individual and organizational outcomes, such as individual innovation (Seibert, Kraimer, & Crant, 2001), sales performance (Crant, 1995), small-firm innovation (Kickul & Gundry, 2002), overall performance, and organizational success (Belschak & Den Hartog 2010; Fay & Frese, 2001).

Given the crucial role of PWB in modern organizations, scholars have sought to identify their main antecedents. Bindl and Parker (2011) presented a model that identifies antecedents and outcomes of PWB. Regarding antecedents of PWB, they distinguished between individual factors (e.g., knowledge, abilities, readiness to change) and situational factors (e.g., job autonomy, leadership, climate). In addition, they integrated motivational processes (e.g., perceived capability, affect-related processes) as linking mechanism between antecedents and PWB. Prior research has also brought to light the importance of several individual factors, e.g.,

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proactive personality (Bateman & Crant, 1993); role breadth self-efficacy (Speier & Frese, 1997), and openness to experiences (Major, Turner, & Fletcher, 2006). Several organizational factors have also found to influence PWB, e.g., organizational climate (Griffin, Neal, & Parker, 2007); transformational leadership (Den Hartog & Belschak, 2012).

Despite an abundance of research, there is still need for knowledge on antecedents of PWB. Furthermore, little research exists on the linking mechanism between antecedents and PWB. Thus, the purposes of the present study are to extend prior research in three ways. First, it investigates a new antecedent (i.e., authentic leadership) which might influence employee's PWB. Grounding our study in Bindl and Parker's (2011) model of PWB, we examine direct relationships between authentic leadership and PWB. Second, it tests a mediated relationship that reflects a psychological process connecting authentic leadership with PWB. Specifically, this paper proposes that authentic leadership influence employee's PWB through organizational commitment. The present study will elucidate whether organizational commitment is a possible mechanism that explains why authentic leadership may be beneficial to positive work behavior. Third, we examine whether authentic leadership differentially affects PWB based on employees' levels of conscientiousness. Thus, we attempt to illuminate possible personality differences in organizational commitment, and explore how these differences relate to PWB in employees with different levels of conscientiousness. In the following sections we outline the concept of authentic leadership in more detail, as well as review the possible mediating role of organizational commitment, and moderating role of conscientiousness in the relationship between authentic leadership and PWB.

Hypothesized Relationships

Authentic Leadership and Proactive Work Behavior

Authentic leadership is "a pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development" (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008: 94). Authentic leaders are also hopeful, optimistic, and confident, and they continuously promote a positive state of confidence in themselves and their followers. In turn, they become ethical role models for their followers (Luthans & Avolio, 2003).

Authentic leaders are likely to have a positive influence on employees' work behaviors. This is because authentic leaders provide support for employees' self-determination, which should increase intrinsic work motivation (Ilies, Morgeson, & Nahrgang, 2005). In addition, high self-awareness and transparency of the authentic leader should lessen uncertainty in the workplace and enhance employees' psychological safety, it is therefore likely that authentic leadership should increase employee's PWB. Research has indicated that authentic leadership play a role in fostering trust, work engagement, voice behavior (Wong, Spence Laschinger, & Cummings, 2010), employee creativity (Malik, Dhar, & Handa, 2016), work role performance (Leroy, Anseel, Gardner, & Sels, 2015), and proactive work behavior (Zhang, Song, Wang, & Liu, 2018).

Hypothesis 1: Authentic Leadership will be positively related to employees' proactive work behavior.

Authentic Leadership and Organizational Commitment

Organizational commitment is “the relative strength of an individual’s identification with, and involvement in a particular organization” (Mowday, Porter & Steers, 1979, p. 226). Committed employees tend to believe in the goals and values of the organization, work hard for the organization, and intend to stay with the organization (Mowday, Porter, & Steers, 1982). Antecedents of organizational commitment can be generally classified as variable related to the organization and those related to the person. Research found that employees’ perceptions of organization dependability, feelings of importance in the organization, and belief that the organization had met their expectations, were positively related to commitment (Steers, 1977). Other factors included organizational support (Eisenberger, Fasolo, & Davis-LaMastro, 1990), participation in decision making (Hall, 1977), employees’ social involvement within the organization (Fukami & Larson, 1984), leader communication and participatory leadership (Mathieu & Zajac, 1990), transformational leadership (Bycio, Hackett, & Allen, 1995), and servant leadership (Liden, Wayne, Zhao, & Henderson, 2008).

Only a few studies have investigated the relationship between authentic leadership and organizational commitment. Avolio, Gardner, Walumbwa, Luthans, & May (2004) found direct effects of authentic leadership on followers’ work attitudes, including organizational commitment, work meaningfulness, job satisfaction, and engagement. Other studies also found that authentic leadership predicted organizational commitment (Jensen & Luthans, 2006; Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008; Lee, 2018). Based on prior research, the present study proposes that:

Hypothesis 2: Authentic leadership will be positively related to employees' organizational commitment.

The Effect of Organizational Commitment on Proactive Work Behavior

Organizational commitment is typically related to perceptions of positive affective state (Meyer, Allen, & Smith, 1993). As a result, this positive state will lead employees to exhibit proactive behavior, including enhanced cooperation, creative problem solving, cognitive flexibility, and persistence (Isen & Baron, 1991). It is also argued that committed employees tend to engage in promotive forms of discretionary behavior (Van Dyne, Cummings, & McLean Parks, 1995), because they are interested in the success and survival of their organization (Meyer et al., 1993). Research found that organizational commitment is strongly related to organization member proactivity (Griffin, Neal, & Parker, 2007), and proactive service performance (Rank, Carsten, Unger, & Spector, 2007).

Hypothesis 3: Organizational commitment will be positively related to employees' proactive work behavior.

While the aforementioned studies have confirmed the positive relationship between organizational commitment and PWB, previous studies have not yet investigated the role of organizational commitment in mediating the relationship between authentic leadership and PWB. Thus, the present study aims to test the indirect effect of authentic leadership on PWB through organizational commitment. Organizational commitment is an appropriate mediator in the hypothesized model because a mediator is often a cognitive, affective, physiological,

motivational state which functions as an individual's psychological process (Hoyle & Robinson, 2003). Theoretically, it is likely that employees who perceive their leaders to be authentic will be more committed to their organizations, which in turn increases higher levels of proactive behavior. Research also indicates that organizational commitment is a critical mediating variable that facilitates proactive initiative (López-Cabarcos, Pérez-Luño, & Valle-Cabrera, 2009) and proactive behavior (Brosi, Spörrle, & Welpel, 2018). This study therefore proposes the following hypothesis:

Hypothesis 4: Organizational commitment will mediate the effect of authentic leadership on proactive work behavior.

The Moderating Role of Conscientiousness

Conscientiousness, one of the Big Five construct, describes socially prescribed impulse control that facilitates task and goal-directed behavior (McCrae & Costa, 1997). Persons with high levels of conscientiousness tend to organize their time, work in a disciplined way toward their goals, strive for accuracy and perfection in their tasks, and deliberate carefully when making decisions. Thus, conscientiousness is related to an individual's degree of self-control, order, persistence, and need for achievement (Costa, McCrae, & Dye, 1991).

Studies has indicated that conscientiousness is the most relevant personality traits which predicts job performance both in western context (e.g., Mount & Barrick, 1995; Salgado, 1997) and in Asian context (e.g., Smithikrai, 2007). Recent empirical evidences also indicate links between conscientiousness and several work behaviors and outcomes, such as retention (Barrick, Mount, & Strauss, 1993), attendance at work (Judge, Martocchio, & Thoresen, 1997), organizational citizenship behavior (Konovsky & Organ, 1996), proactive work behavior (Thomas, Whitman, & Viswesvaran, 2010; Wu & Li, 2016), extrinsic career success and occupational status (Judge, Higgins, Thoresen, & Barrick, 1999). Thus, the fifth hypothesis is:

Hypothesis 5: Conscientiousness will moderate the direct relationship between authentic leadership and proactive work behavior such that high compared with low levels of conscientiousness strengthening this association.

It is also likely that conscientiousness moderates the strength of the mediator function of organizational commitment for the relationship between authentic leadership and proactive work behavior. Thus, the sixth hypothesis is:

Hypothesis 6: Conscientiousness will moderate the indirect relationship between authentic leadership and proactive work behavior (through organizational commitment) such that high compared with low levels of conscientiousness strengthening this association.

In sum, all hypothesized relationships are shown in Figure 1.

Method

Sample

The research sample consisted of 375 persons (supporting staff = 282 and academician = 93) working in a large public university in Northern Thailand. The sample was selected based on their job roles by using a multi-stage sampling method. About 57% of the sample were

females, with a mean age of 39.91 years. The average tenure in their career was 11.39 years. The data were collected during September-October 2017.

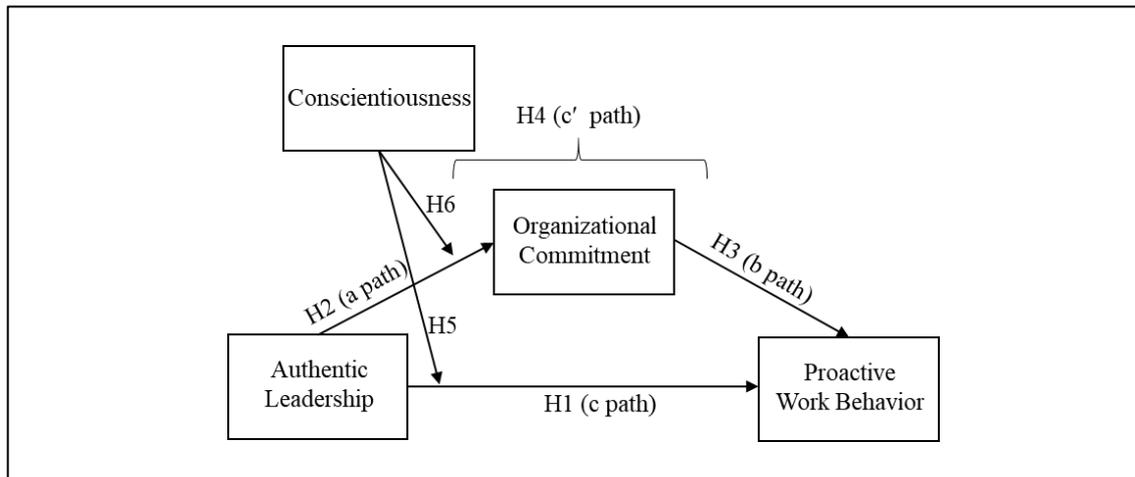


Figure 1. The proposed research model

Measures

All of the scales used in the present study, except a demographic information sheet, were translated from English into Thai with back-translation to ensure language equivalence.

1. Proactive work behavior. Employees' proactive work behavior were measured with a 13-item scale adapted from Parker and Collins's scale (2010). Sample items are: "I spend time planning how to prevent reoccurring problems" and "I search out new techniques, technologies and/or product ideas". Responses were made on a 5-point scale ranging from 0 (strongly disagree) to 5 (strongly agree). Cronbach's alpha for the scale was .93

2. Authentic leadership. The 16-item scale developed by Walumbwa et al. (2008) was used to measure authentic leadership behavior. The participants were asked to rate their supervisors' leadership style. These items were rated on a 5-point scale ranging from 0 (strongly disagree) to 5 (strongly agree). Sample items are: "My leader says exactly what he or she means" and "My leader makes difficult decisions based on high standards of ethical conduct". The reliability of the scale was .93.

3. Organizational commitment. The 9-item scale developed by Mowday, Steers, and Porter (1979) was used to assess employees' organizational commitment. Sample items are: "I am proud to tell others that I am part of this organization" and "I would accept almost any type of job assignment in order to keep working for this organization". Respondents were asked to rate each item on a 5-point scale ranging from 0 (strongly disagree) to 4 (strongly agree). Cronbach's alpha for the scale was .92.

4. Conscientiousness. A conscientiousness subscale from the HEXACO-60 developed by Ashton and Lee (2009) was used to assess employees' levels of conscientiousness. This 10-item questionnaire was rated on a 5-point scale ranging from 0 (strongly disagree) to 5 (strongly agree). Sample items are: "I plan ahead and organize things, to avoid scrambling at the last minute" and "I often push myself very hard when trying to achieve a goal". Internal consistency reliability of the scale was .78.

5. Demographic information sheet. The demographic information sheet asked participants to indicate their gender, age, educational level, and job tenure.

Results

Confirmatory factor analysis

To examine whether PWB, authentic leadership, organizational commitment, and conscientiousness captured different constructs, a series of confirmatory factor analyses (CFA) was conducted by using AMOS 21 (Arbuckle, 2012). Measurement model analyses evaluated the contribution of each items to the construct (latent variables) being assessed. Based on these analyses, one item from the organizational commitment scale, two items from the PWB and conscientiousness scales, and six items from the authentic leadership scale were dropped due to low standardized loading estimates during CFA. The factor loadings of the remaining items for PWB, authentic leadership, organizational commitment, and conscientiousness ranged between .40 and .88. These results support the discriminant validity of study variables. Common method bias was therefore not an apparent concern in this study. Table 1 shows descriptive statistics, reliabilities, and intercorrelations among the study variables. In support of Hypothesis 1, 2 and 3, this correlation matrix indicates that significant positive relations were found between authentic leadership and PWB ($r = .62, p < .01$), between authentic leadership and organizational commitment ($r = .72, p < .01$), and between organizational commitment and PWB ($r = .62, p < .01$).

Table 1

Means, Standard Deviations, and Correlations between Study Variables

Variables	<i>M</i>	<i>SD</i>	1	2	3	4
1. Proactive work behavior	3.17	.64	(.93)			
2. Authentic leadership	2.99	.68	.62**	(.93)		
3. Organizational commitment	3.16	.62	.62**	.72**	(.92)	
4. Conscientiousness	2.87	.55	.47**	.46**	.49**	(.78)

Note: ** $p < .01, n = 375$; Reliabilities of scales are in parentheses along diagonals.

To investigate the mediation effect of organizational commitment (Hypothesis 4), the bootstrap method with an SPSS application (PROCESS, Model 4) provided by Preacher and Hayes (2004) was used. As can be seen in Table 2, the results indicate as expected a positive relationship between authentic leadership and PWB (c path): $\beta = .62, p < .01$; a similar result is found for the estimate when controlling for organizational commitment, gender, age, education, tenure (c' path): $\beta = .35, p < .01$. A significant relationship between authentic leadership and organizational commitment (a path): $\beta = .72, p < .01$. In addition, organizational commitment is significantly related to PWB (b path): $\beta = .36, p < .01$. Based on these outcomes, the mediation test for organizational commitment was performed. The lower part of Table 2 shows that the result of the bootstrap confirmed Hypothesis 4. Specifically, the bootstrapped 95% confidence interval (CI) around the standardized indirect effect ($\beta = .26, SE = .05$) did not include zero (.17, .36).

Table 2

Results of Mediation Analysis

	β	SE	t	R ²
Direct and total effects				
• Organizational commitment regressed on authentic leadership (a path)	.72**	.04	19.69	.52**
• PWB regressed on organizational commitment (b path)	.36**	.06	6.55	.45**
• PWB regressed on authentic leadership (c path)	.62**	.04	15.01	
• PWB regressed on authentic leadership, controlling for organizational commitment, gender, age, education, tenure (c' path)	.35**	.06	6.37	
	Bootstrapped indirect effect	Boot SE	Boot LLCI	Boot ULCI
Bootstrap result for indirect effect				
Organizational commitment	.26	.05	.17	.36

Note: Standardized regression coefficients are reported. Listwise N = 375. LLCI = lower level confidence interval; ULCI = upper level confidence interval. Bootstrap sample size = 5,000; **p < .01.

Table 3

Results of Moderated Mediation Analyses

Predictor	PWB				Organizational commitment			
	β	SE	LLCI	ULCI	β	SE	LLCI	ULCI
Authentic leadership	.30**	.06	.19	.41	.58**	.04	.50	.66
Conscientiousness	.16**	.04	.07	.25	.20**	.04	.12	.27
Organizational commitment	.29**	.06	.18	.40				
Authentic leadership x Conscientiousness	.10*	.04	.01	.19	.13**	.04	.06	.21
R ²	.48**				.57**			
Indirect effect								
Conditional indirect effects at different levels of conscientiousness: (M ± 1 SD)	Bootstrapped indirect effect	Boot SE	Boot LLCI	Boot ULCI				
-1 SD	.13	.04	.06	.22				
M	.17	.04	.08	.26				
+1 SD	.21	.05	.11	.31				

Note: Standardized regression coefficients are reported. Listwise N = 375. LLCI = lower level confidence interval; ULCI = upper level confidence interval. Bootstrap sample size = 5,000; *p < .05, **p < .01.

Next, Hypothesis 5 was tested whether conscientiousness interacts with authentic leadership in predicting PWB, by entering the interaction terms of authentic leadership with

conscientiousness. Finally, to test the moderated mediation effects (Hypothesis 6), the PROCESS (Model 8) was performed. Table 3 reveals that, consistent with our prediction in Hypothesis 5, conscientiousness significantly influenced the positive relationship between authentic leadership and PWB ($\beta = .10, p < .05$). In addition, support for hypothesis 6 was found because authentic leadership predicted higher organizational commitment ($\beta = .58, p < .01$), which in turn predicted higher PWB ($\beta = .29, p < .01$). We investigated the conditional indirect effect of authentic leadership on PWB (through organizational commitment) at three values of conscientiousness: at the mean, at 1 SD below, and at 1 SD above the mean. The results in Table 3, show that the conditional indirect effect was significant at the low levels ($\beta = .13$, bootstrap 95% CI = [.06, .22]), average levels ($\beta = .17$, bootstrap 95% CI = [.08, .26]), and high levels ($\beta = .21$, bootstrap 95% CI = [.11, .31]) of conscientiousness. These results demonstrated that the indirect effect of authentic leadership (through organizational commitment) on PWB is particularly strong under high compared with low levels of conscientiousness.

Discussion

This paper formulated and tested an integrative model that examines relationships among authentic leadership, proactive work behavior, organizational commitment, and conscientiousness. The present findings contribute in several ways to understanding the effects of authentic leadership on PWB. First, the results show that authentic leadership has both direct and indirect effects on PWB. The results also contribute to the literatures by showing that organizational commitment mediates the effects of authentic leadership on PWB. The main contribution of this study pertains to the results of the moderated mediation model, which examined the moderating effect of conscientiousness in the mediation process of organizational commitment. An important finding is that the direct and indirect effects of authentic leadership (through organizational commitment) on PWB are particularly strong for high levels compared with the low levels of conscientiousness.

These findings can be explained that transparency in relationships and consistency between principles, words, and actions displayed by authentic leaders contribute to followers' satisfaction with the supervisor, willingness to perform, and higher levels of commitment, (Avolio et al., 2004). As a result, this commitment to the organization increases higher levels of PWB. Additionally, the present study demonstrates that the authentic leadership-commitment-PWB process is strengthened by high instead of low levels of conscientiousness. This is because conscientious employees tend to organize their time, work in a disciplined way toward their goals, strive for accuracy and perfection in their tasks. When proactive employees show initiative, take action, and persevere until change occurs, they engage in conscious goal-directed processes, including both goal generation and goal striving (Chen & Kanfer, 2006). Thus, this disposition significantly enhances employee proactivity.

In terms of limitation, self-reports were used as means of data collection, therefore respondents of this study might give socially desirable responses even though their anonymities are guaranteed. Research on self-reported performance, however, suggests that self-report data are comparable to ratings from other sources (Fecteau & Craig, 2001).

The present study suggests that the mediating role of organizational commitment is useful in understanding the effects of leadership factors on PWB. Nonetheless, future research directions should explore other possible mediators (e.g., work engagement, psychological

empowerment) and/or moderators (e.g., self-efficacy, optimism) of this relationship. Additionally, it is also important to identify other possible determinants of PWB, for example, group norms, cultural values, etc.

The results of the present study have several important practical implications. First, organizations may increase employees' PWB and commitment by augmenting the authentic leadership qualities of managers. As the results from the current study suggest, organizational commitment and PWB are positively affected by authentic leadership. Second, this study suggests that there is clearly a role for personality assessment. Specifically, selecting individuals who are predisposed to show proactive behaviors, such as those who are high in conscientiousness could be a good human resource management recruitment practice. Third, top management of organizations should acknowledge the value of PWB and, if applicable, praise it with valuable rewards. If employees who demonstrate PWB receive valuable rewards, other employees may also follow and demonstrate more PWB. Lastly, in terms of behavioral science implications, this study provides some insight regarding a psychological process connecting authentic leadership with PWB. It would be beneficial for both organizations and scholars to delve more deeply into the dynamics of this process.

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