

AN INVESTIGATION OF THE RELATIONSHIP BETWEEN AUTHENTIC LEADERSHIP AND ORGANIZATIONAL COMMITMENT OF NURSING STAFF IN TAIWAN

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ABSTRACT

This study examined the relationship between nursing faculty members' perceptions of nursing directors' leadership and nurses' organizational commitment in Taiwan. According to the social identity Theory, leadership group prototypicality have an important effect in employee's group identity, and work attitude. Leader prototypes are useful heuristics for judgments about leaders in a complex world. The purpose of this study was to investigate the relationship among authentic leadership and other constructs. This study specifically focused on the hospital industry, involving a study sample of nurses from six hospitals in Southern Taiwan. A purposeful sampling method was adopted, and 342 nurses' data were collected. This study used HLM methods to test the hypotheses. The crucial findings of this study revealed a significant association between authentic leadership and organizational commitment via psychological ownership and leader group prototypicality. Sequential mediation analysis revealed a significant association between authentic leadership and organizational commitment via mediators, psychological ownership leader group prototypicality. The tested model provides empirical evidence about the pattern of authentic leadership in health care workplace, thus confirming the important of authentic leadership and followers' positive cognition of their organizations.

Keywords: Authentic Leadership, Leader Group Prototypicality, Psychological Ownership, Organizational Commitment, Social Identity Theory (SIT).

INTRODUCTION

In the last 10 years, increasingly more studies (Hogg & Terry, 2000; Haslam, 2001; Haslam, Van Knippenberg, Platow, & Ellemers, 2003) have applied social identity and self-categorization analyses to group and organizational processes. The social identity theory (SIT) of leadership is a formal extension and application of SIT, particularly the SIT of the group (self-categorization theory) and the social identity analysis of social influence, which is used to explain leadership as a social influence phenomenon (Hogg, Knippenberg, & Rast, 2012) According to a managerial perspective, leadership is a process through which a leader changes the way followers envision themselves. On the basis of SIT, this study focused on subordinates' psychological reactions to a leader's behavior and the subordinate's expectation of what leaders should be.

The biggest obstacle to establishing unhealthy workplaces for nurses may be ineffective leadership. Nurse managers create the working conditions for nurses by shaping the quality of support, information, and resources available in the workplace (Laschinger et al., 2009). Nursing leadership has been shown to critically influence the quality of nursing work environments

(Cumming, MacGregor, Davey, Lee, Wong, Lo, Muise, & Stafford, 2010) and, to some extent, patient outcomes (Wong, Laschinger, & Cummings, 2010). Recent literature has also suggested that authentic leadership may positively affect employee attitudes and behaviors. For example, Ilies, Morgeson, & Nahrgang (2005) asserted that authentic leaders are likely to positively influence followers' behaviors because such leaders provide support for followers' self-determination. Although most researchers have acknowledged that leadership is an interaction process within groups (Hollander, 1995), the social-cognitive processes associated with psychologically belonging to a group has not really been elaborated (Hogg & van Knippenberg, 2003). In management literature, scholars (Rousseau & Shperling, 2003) have addressed the roles of formal organizational ownership and psychological ownership (Van Dyn & Pierce, 2004). In addition, organizational commitment continues to receive attention from both scientists and practitioners (Cohen, 1993). Numerous studies have sought to develop the construct of organizational commitment and to identify its antecedents and consequences (Li, Ahlstrom, & Ashkanasy, 2010).

The major aim of this study was to contribute to the body of literature on authentic leadership, psychological ownership, and organizational commitment. This study explored the influence of authentic leadership on subordinates' perception to the leader and their own psychological ownership.

LITERATURE REVIEW

The issue of authentic leadership has been generating increased interest in both practical and academic domains (. This study primarily examined the links between authentic leadership and organizational commitment because previous theoretical work suggested that authentic leaders, through ethical role modeling, transparency, and balanced decision-making, create conditions that promote followers' positive cognition. Leadership is a process of social perception. Leadership perceptions emerge from "a micro-level, psychological process that involves a single individual's perception of a potential leader" (Braun, Peus, & Frey, 2018). Previous study (Chen, Lee, Chou, Wu, Chen, & Huang, 2018) has examined employee psychological ownership is related to various crucial organizational outcomes, including employee retention, turnover, and overall profitability.

Leaders are believed to activate the collective level of followers' self-concepts (Huettermann, Doering, & Boerner, 2014). More specifically, leaders must strive to create and maintain a coherent sense of "we" and "us," and to define what "us" means (and does not mean) for followers (Steffens, Haslam, Reicher, Platow, Franssen, Yang, Ryan, Jetten, Peters, & Boen, 2014). Social identity theorists note, however, that group prototypicality might be at least as critical as having characteristics widely associated with a particular type of leader (Uhl-Bien, Riggio, Lowe, & Carsten, 2014). Within a group, the more the group members identify with the group (Van Knippenberg, 2011), the stronger is the influence of leader group prototypicality.

A previous study predicted that such leader behaviors will be associated with a higher level of relational identification, as opposed to the classical identification, in which the focus is on suppressing personal individuality for the benefit of another person (Kelman, 1958). Ilies et al. (2005) asserted that the judicious relational orientation of more authentic leaders should

encourage followers to personally identify with both the leader and the organization. Thus, followers would be more likely to identify with the leader's values and beliefs, internalizing them as their own (Ilies et al., 2005).

Sieger, Bernhard, and Frey (2011) addressed the research gap by introducing the concept of psychological ownership as a mediator in the relationships between justice perceptions (distributive and procedural) and affective commitment. Ellemers, Spears, and Doosje (2002) contested that when collective identities are involved, the level of commitment to a particular group or category determines how group characteristics, norms, or outcomes will influence the perceptual, affective, and behavioral responses of individuals belonging to that group. On the basis of the aforementioned literature, we argue that followers who regard their leader to be authentic are more inclined to regard the organization as "theirs." Therefore, the following hypotheses were proposed.

Hypothesis 1: Leader group prototypicality mediates the relationship between authentic leadership and organizational commitment.

Hypothesis 2: Personal psychological ownership mediates the relationship between authentic leadership and organizational commitment.

Hypothesis 3: Personal psychological ownership mediates the relationship between leader group prototypicality and organizational commitment.

There has also been a growing recognition that leaders' influence is based on a sense of psychological connection or identification with the organization or group and its leadership (Lord & Brown, 2001). According to Avolio, Gardner, Walumbwa, Luthans, and May's (2004) leadership model, they proposed that authentic leadership influence followers' identification, attitudes and behaviors. And perceptions of leader authenticity is also strongly influenced by concepts of both leader and follower identity, and the extent to which leaders engage in behaviors that affirm and support the needs of the collective (Gardner, Cogliser, Davis, & Dickens, 2011).

In summary, this study suggest that studies on leadership facilitate a deeper understanding of the social identity process and the manifest variables that may intensify the interaction between leaders and followers. Therefore, this paper examines how the social identity perspective contributes to an enhanced understanding of the relationships among authentic leadership, leader group prototypicality, personal psychological ownership, organizational commitment, and intention to leave.

On the basis of SIT, we assessed the influence of authentic leadership on employee organizational commitment and intention to leave through two intermediate mechanisms. Focusing on prototypicality and ownership as intervening mechanisms linking authentic leadership to employee's commitment to stay, we hope to contribute to the literature by explaining how authentic leaders enhance employee identification with groups and organizations. Therefore, the following hypothesis was proposed.

Hypothesis 4: The relationship between authentic leadership and organizational commitment is sequentially mediated by leader group prototypicality and personal psychological ownership.

METHODOLOGY

3.1 Research design

The data for testing the hypotheses were gathered in a cross-team and cross-organizational sample. The followers additionally answered questions about perceptive variables.

3.2 Sample and Procedures

The data for testing the hypotheses were gathered in a cross-team and cross-organizational sample. The selected research participants were required to satisfy a specific set of criteria. Survey questionnaires were administered during working hours to 600 nurses at six hospitals (including teaching and nonteaching hospitals) located in Southern Taiwan. A purposeful sampling method was adopted, and 342 nurses' data were collected.

Participants were informed that no information would be traceable to an individual employee and guaranteed anonymity. Participants were also informed that the investigation focused on factors affecting leadership and personal perception. Following deletion of missing data, a final sample of 342 nurses responses was obtained.

RESULTS

4.1 Tests of hypotheses

Model 1

Effect of Authentic Leadership Perception on Leader Group Prototypicality

Authentic leadership perception and leader Group prototypicality were both team level variables to test the regression effects between these two variables.

Table 1 The effect of Authentic Leadership Perception on Leader Group Prototypicality

Model 1	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	β	Std. Error	Beta		
Constant	3.453	0.730		4.728	0.000
Authentic Leadership Perception	0.354	0.140	0.415	2.538	0.016

Model 2

Effect of Authentic Leadership Perception, Leader Group Prototypicality on Psychological Ownership

Authentic leadership perception and leader group prototypicality were team level variables to test the cross-hierarchical regression effects on the individual level variable of psychological ownership. The equations are as follow:

Equation 1

$$\text{Level 1: Psychological Ownership} = \beta_{0j} + r_{ij}$$

$$\text{Level 2: } \beta_{0j} = \gamma_{00} + \gamma_{01} * (\text{Authentic Leadership Perception}) + \mu_{0j}$$

Table 2 The total effect of Authentic Leadership Perception on Psychological Ownership

Variable	Coefficient	S.E.	t ratio	df	p value
Intercept1, β_0					
Intercept2	4.580	0.269	17.025	31	0.000
Authentic Leadership perception	0.151	0.049	3.063	31	0.005

Equation 2

Level 1: Psychological Ownership = $\beta_{0j} + r_{ij}$

Level 2: $\beta_{0j} = \gamma_{00} + \gamma_{01} * (\text{Authentic Leadership Perception}) + \gamma_{01} * (\text{Leader Group Prototypicality}) + \mu_{0j}$

Table 3 The effect of Authentic Leadership Perception, Leader Group Prototypicality on Psychological Ownership

Variable	Coefficient	S.E.	t ratio	df	p value
Intercept1, β_0					
Intercept2	3.733	0.309	12.043	30	0.000
Authentic Leadership perception	0.065	0.050	1.301	30	0.203
Leader Group Prototypicality	0.245	0.064	3.777	30	0.001

As shown in Table 2, the total effect of authentic leadership ($\gamma = 0.151, p < 0.01$) had a significant relationship with psychological ownership. Moreover, as shown in Table 3, leader group prototypicality ($\gamma = 0.245, p < 0.01$) had a significant relationship with psychological ownership.

Model 3

Effect of Authentic Leadership, Leader Group Prototypicality, Psychological Ownership on Organizational Commitment

Authentic leadership perception and leader group prototypicality were team level variables and psychological ownership was individual level variable to test the cross-hierarchical regression effects on the individual level variable of organizational commitment. The equations is as follow:
Equation 1

Level 1: Organizational Commitment = $\beta_{0j} + r_{ij}$

Level 2: $\beta_{0j} = \gamma_{00} + \gamma_{01} * (\text{Authentic Leadership Perception}) + \mu_{0j}$

Table 4 The total effect of Authentic Leadership Perception on Organizational Commitment

Variable	Coefficient	S.E.	t ratio	df	p value
Intercept1, β_0					
Intercept2	4.105	0.355	11.535	31	0.000
Authentic Leadership perception	0.166	0.063	2.621	31	0.014

Equation 2

Level 1: Organizational Commitment = $\beta_{0j} + r_{ij}$

Level 2: $\beta_{0j} = \gamma_{00} + \gamma_{01} * (\text{Authentic Leadership Perception}) + \gamma_{02} * (\text{Leader Group Prototypicality}) + \mu_{0j}$

Table 5 The effect of Authentic Leadership Perception, Leader Group Prototypicality on Organizational Commitment

Variable	Coefficient	S.E.	t ratio	df	p value
Intercept1, β_0					
Intercept2	3.595	0.252	14.245	336	0.000
Authentic Leadership perception	0.113	0.043	2.590	336	0.010
Leader Group Prototypicality	0.127	0.047	2.661	336	0.009

Equation 3

Level 1: Organizational Commitment = $\beta_{0j} + \beta_{0j} * (\text{Psychological Ownership}) + r_{ij}$ Level 2: $\beta_{0j} = \gamma_{00} + \gamma_{01} * (\text{Authentic Leadership Perception})$ **Table 6 The effect of Authentic Leadership perception, Psychological Ownership on Organizational Commitment**

Variable	Coefficient	S.E.	t ratio	df	p value
Intercept1, β_0					
Intercept2	2.575	0.523	4.922	31	0.000
Authentic Leadership perception	0.113	0.063	1.798	31	0.081
Psychological Ownership β_1					
Intercept	0.335	0.049	5.191	339	0.000

As shown in Table 4, authentic leadership perception ($\gamma = 0.166$, $p < 0.05$) had a significant relationship with organizational commitment. Table 5 indicates that leader group prototypicality ($\gamma = 0.127$, $p < 0.01$) was significantly related to organizational commitment. Thus, Hypothesis 7 was supported. In addition, as evident in Table 6, psychological ownership ($\gamma = 0.335$, $p < 0.001$) had a significant relationship with organizational commitment.

The mediation effects results

Hypothesis 4 states that the relationship between authentic leadership and organizational commitment is sequentially mediated by leader group prototypicality and personal psychological ownership (Figure 4.5). Furthermore, the results of the Sobel test in Table 4.23 indicate that the leader group prototypicality and psychological ownership sequentially mediate the relationship between authentic leadership and organizational commitment. Therefore, Hypothesis 4 was supported.

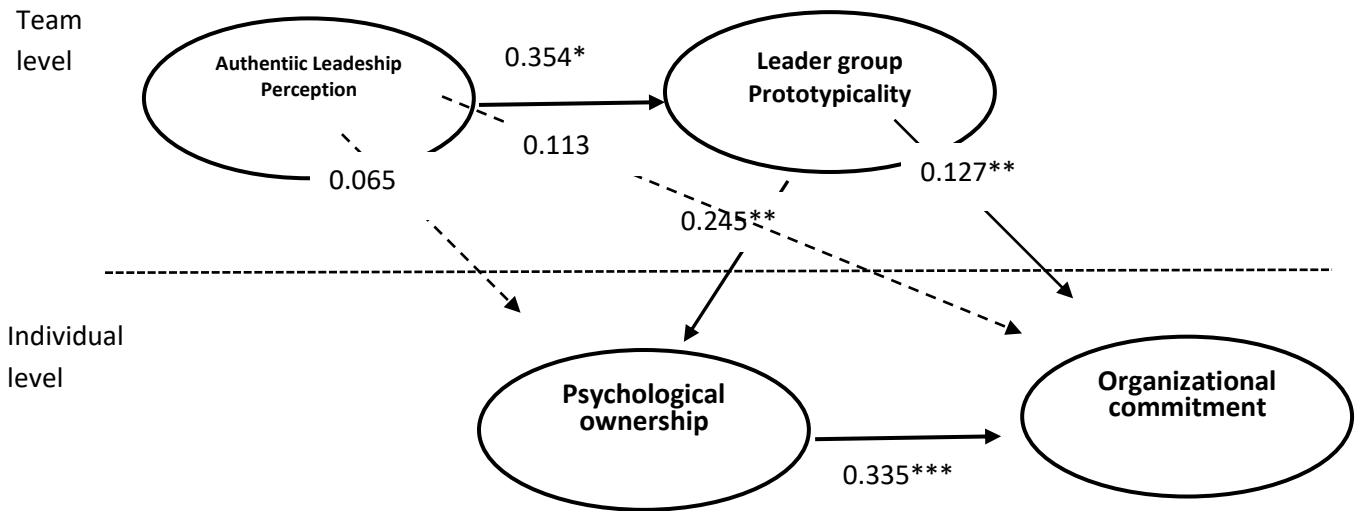


Figure 1 The sequential mediation model of this study

Note: * $p > 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 7 Sobel test of the statistical significance of indirect effects

Hypotheses	Independent variable	Mediator variable	Dependent variable	Standardized indirect effect	Z value	Significant
H1	Authentic Leadership →	Leader group Prototypicality →	Organizational Commitment	$(0.354) * (0.127) = 0.045$	1.846	Non-Significant
H2	Authentic Leadership →	Psychological Ownership →	Organizational Commitment	$(0.065) * (0.335) = 0.021$	1.276	Non-significant
H3	Authentic Leadership →	Leader group Prototypicality →	Psychological Ownership	$(0.354) * (0.245) = 0.086$	2.109	Significant
H4	Leader group Prototypicality →	Psychological Ownership →	Organizational Commitment	$(0.245) * (0.335) = 0.082$	3.340	Significant

Note: N=342 at individual level (Level 1), n=33 at team level (Level 2)

* $p > 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 8 Sobel test of the statistical significance of sequential mediation effects

Hypotheses	Independent variable	First Mediator	Second Mediator	Dependent variable	Sequential mediation effect	Z value	Significant
H12	Authentic Leadership Perception →	Leader group Prototypicality →	Psychological Ownership →	Organizational Commitment	$(0.354) * (0.245) * (0.335) = 0.029$	2.016	Significant

Note: N=342 at individual level (Level 1), n=33 at team level (Level 2)

DISCUSSION

The primary objectives of the study were to investigate the predictors of the organizational commitment by reviewing literature, outline conceptual research for further empirical testing,

and establish relationships between perception of leadership and employees' organizational commitment. The results supported a model linking authentic leadership to organizational commitment through the sequential mediation effects of leader group prototypicality and psychological ownership among experienced nurses. This was the first study to investigate the mediating role of leader group prototypicality in the influence of authentic leadership behavior on organizational commitment. This result also confirms the accuracy of the cross-level analysis used in this study. The results are discussed in the following.

At the team level, authentic leadership was found to positively and significantly influence leader group prototypicality, which reinforced the positive influence of authentic leadership on psychological ownership (e.g. Chen, et al. 2018). Additionally, through the sequential mediation effects of leader group prototypicality and personal psychological ownership, authentic leadership was found to significantly and positively influence organizational commitment.

The central contribution of this study is the examination of the influence of authentic leadership on organizational commitment, a relationship that has been little studied in the leadership field. Following a literature review, we investigated the sequential mediation effects of leader group prototypicality and psychological ownership on the relationship between authentic leadership and organizational commitment. Relevant research on the social identity leadership theory has revealed that effective leadership perceptions are increasingly dependent on group prototypicality. Previous studies (Alok & Israel, 2012; Alok, 2014; Chen, et al. 2018) have demonstrated the influence of authentic leadership on psychological ownership; however, in the current study, we identified leader group prototypicality as a key variable in the relationship between these two constructs. Empirical studies have suggested that followers working with leaders who are more committed to their organizations demonstrate fewer withdrawal behaviors (Keskes, 2014).

The study results reveal that followers' perceptions of authentic leadership influence the feeling of psychological ownership. The results also support the generalizability of the effects of psychological ownership in a stressful nursing environment context and indicate an antecedent to psychological ownership, namely, authentic leadership and prototypicality. The findings of this study help to fill a research gap about the concept and phenomenon that leader group prototypicality and psychological ownership mediate the relationship between authentic leadership and organizational commitment.

CONCLUSIONS

The results of this study revealed that the perceived authentic leadership characteristics of nurse leaders may be positively related to subordinate nurses' psychological ownership and commitment. This is the first study to examine the relationships among research variables in a Taiwan context and in the hospital industry. This analysis supports the growing body of work that finds the role of nursing managers is a major factor in nurses' decisions about whether or not to remain in their current workplace. That is, it is the 'human' skills most valued by nurses in their leaders.

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Serial mediation analysis revealed a significant association between authentic leadership and organizational commitment. The influence of the theoretical model of authentic leadership, leader group prototypicality, and personal psychological ownership on organizational commitment was supported because the results revealed full sequential mediation effects between authentic leadership's influence and organizational commitment by two (serial) mediators. In addition, we observed indirect influences of leader group prototypicality and psychological ownership on organizational commitment. The results support a theory linking authentic leadership with leader group prototypicality, psychological ownership, and organizational commitment in a collective setting. Thus, this study advances the understanding of the association between leadership and SIT.

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