

## **The Impact of Intrinsic Motivation on The Effectiveness of Leadership Style towards on Work Engagement**

Chin-Yi Shu  
Ming Chuan University  
E-Mail: chinyushu@hotmail.com

### **ABSTRACT**

The aim of this research was to investigate the impact of authoritarian leadership and authentic leadership, which satisfies employees' needs to different extents, on employees' engagement with their work. The moderating effect of intrinsic motivation between leadership and work engagement also was tested among Chinese workers in Taiwan. The snowball sampling method was used, and data were collected for 350 subordinate-supervisor dyads. The results of regression analysis indicated that, when controlling for obedience, authoritarian leadership was found to be negatively related to subordinates' work engagement, but authentic leadership was found to be positively related to work engagement. Intrinsic motivation appears to foster the positive relationship between authentic leadership and work engagement and buffer the adverse impact of authoritarian leadership on work engagement. The theoretical, research, and practical implications of these findings are discussed in this paper.

Keywords: Self-Determination Theory, Bicultural Self, Intrinsic Motivation, Work Engagement

### **INTRODUCTION**

Western modernization created a distinct phenomenon of bi-culturalism among people living in the non-Western world. Lu (2011) and Yang, Liu, Chang, and Wang (2010) described this as a product of western culture's influencing Chinese culture, which led to the emergence of a "traditional-modern" society. Biculturalism represents a scenario in which "contrasting self-systems coexist and intricately integrate within an individual" (Markus & Kitayama, 1991). These self-systems include Interdependent self (traditional Chinese self), emphasizing a social-oriented nature that places importance on roles, status, and responsibilities and the Independent

self (Western self), emphasizing an individual-oriented nature that places importance on fulfillment, potential, and individual needs and rights.

Yang (2004) proposed the need to include reference to the Independent self when representing modern Chinese people to reflect the effect of societal changes and help companies deal with the complex amalgam of Eastern and Western values that are represented extensively in business organizations today. This means that both traditional and modern self are now part of the make-up of most Chinese individuals (Lu, 2011). However, concerns have been raised by scholars regarding how balance can be achieved in facing these competing contrasts. It is only when the conflict of seemingly opposing needs, drives, and tendencies are resolved that a well-adapted and fully-functioning personality can develop (Lu, Chang, & Chang, 2012).

In the workplace, direct supervisors are the impetus that affects employees' work behaviors and attitudes (Kovjanic, Schuh, & Jonas, 2013), because they are authorized by the organization to interact frequently with their employees. One important issue that arises in modern Chinese organizations concerns how to manage employees with a bicultural self and encourage them to have positive work behaviors. Traditional Chinese leaders tend to use an authoritarian leadership style (Cheng Chou, & Farh, 2000), but one must question whether it is still appropriate for modern Chinese leaders. Should Chinese leaders use a new leadership style?

Several researchers have suggested that authentic leadership is an effective leadership style for promoting quality work environments (Bamford, Wong, and Laschinger, 2013). Hence, the aim of this research was to investigate the influence of authoritarian and authentic leadership on modern Chinese worker's engagement with their work to determine which leadership style is more appropriate for them.

When the leadership style of a supervisor satisfies employees' needs, that supervisor's effect is maximized (Lambert, Tepper, Carr, Holt, and Barelka, 2012). The implication of this is that a supervisor's effectiveness depends on what employees want. Deci and Ryan (2000) proposed that an individual has three types of needs, i.e., autonomy, competence, and relatedness. The needs for autonomy and competence involve active engagement with tasks that individuals find interesting, and that, in turn, promotes growth in their autonomy and competence. Relatedness also is important to intrinsic motivation, although more indirectly. There is a tendency for workplace situations with identifiable characteristics of secure relatedness to perpetuate a greater feeling of intrinsic motivation among employees (Ryan and La Guardia, 2000). Therefore, the suggestion is that work relationships with a direct supervisor that are supported by an environment that cultivates a network of support and trust are necessary precursors for employees to have intrinsic motivation.

It is plausible that the traditional Chinese self can be associated with a person's relational need, whereas the modern Chinese self can be associated with competence and autonomy needs. Hence, we must know the influence of the bicultural self on leadership and work engagement to conduct a meaningful investigation of the effectiveness of authentic leadership and authoritarian leadership on Chinese workers. In this research, Self-Determination Theory (SDT) (Deci and Ryan, 1985) was used as a framework to investigate these relationships. SDT proposes that satisfaction in intrinsic motivation will lead to positive work outcomes (e.g., performance, job satisfaction, and work engagement).

Authentic leadership supports the needs of autonomy and competence for employees who depend on their Independent selves and have high regard for them since they provide encouragement for employees' autonomy and allow them to act based on their intrinsic interests (Guntert, 2015). Authoritarian leaders tend to maintain strong authority and control over subordinates and expect respect for their authority. Thus, their employees must maintain good relationships with their leaders, meet obligations, and be loyal to the organization (Cheng, Chou, Huang, Wu, and Farh, 2003). Such a dyadic relationship between the leader and the employee reflects interdependence that relates with the Chinese traditional self. Therefore, authoritarian leaders support the need for relatedness of employees motivated to fit in with relevant others who put high regard on their interdependent self. This exhibits a positive outcome in the organization, since what is central to an interdependent self is the individual's relationship to others rather than fulfillment of the inner self (Hamaguchi, 1985).

To summarize, previous studies have shown that employees' motivation levels correlate positively with work performance and general work behavior (Griffin and Neal, 2000). However, few studies have investigated how employees' intrinsic motivation manifests itself in terms of general work behavior and how intrinsic motivation levels satisfy the needs of autonomy, competence, and relatedness and impact upon the effectiveness of leadership styles in promoting employees' engagement with their work. The aim of this research was to investigate that relationship and determine the significance of motivation in determining the suitability of leadership styles and improving the engagement of modern Chinese employees with their work.

## LITERATURE REVIEW

### **The Self-Construct and Self-Determination Theory (SDT)**

An extensive body of literature on globalization and multiculturalism has been published in the 21<sup>st</sup> century, particularly around the term “bicultural self” (Lu, 2011; Yang et al., 2010), to describe individuals from a non-western background, such as China and Taiwan, who were previously believed to be monocultural. It has been found that Chinese use two separate ways integrated within them to construct the coexistence of both the independent and interdependent self (Lu et al., 2012). This serves as evidence of the existence of the bicultural self, which is evolving rapidly as a result of societal modernization.

This research investigated the most appropriate leadership style for Chinese organizations in managing employees with bicultural selves who are higher in intrinsic motivation than employees who only have the traditional self. To achieve this goal, Self-determination Theory (SDT) was used as a framework to discuss this concept. SDT is a motivation theory (Deci & Ryan 1985; Guntert, 2015), and it proposes three universal, innate, psychological needs, i.e., autonomy, competence, and relatedness, that characterize the fundamental mechanism of motivation (Deci & Ryan 2000; Guntert, 2015). When people feel motivated by activities that allow them to satisfy these three needs, it means that those activities are driven by intrinsic motivation. Deci and Ryan (2000) defined intrinsic motivation as “the doing of an activity for its inherent satisfaction rather than for some separable consequence.” The need for autonomy is the need to feel that one is conducting a task of her or his own choice without coercion. The need for competence is the need to feel capable of learning and doing work-related tasks. Last, the need for relatedness is the need to feel a sense of belonging with significant others (Molix & Nichols, 2013). These needs are regarded as essential ingredients for an individual’s optimal functioning and performance (Deci & Ryan, 2000).

Needs found in intrinsic motivation are likely to be related to the interdependent and independent view of the self, as introduced by Markus and Kitayama in 1991 (Lu, 2011; Lu et al., 2012). An interdependent view of the self is a self-characterization that finds important self-representations within one’s social relationships and can be seen as typical of the traditional self of the Chinese in their approach to both work and society in general (Lu et al., 2012). In contrast, the view of the independent self sees an individual as an autonomous, free entity and finds important self-representations within the individual. More traditionally, the individually-oriented view of the self is associated with Western cultures (Lu, 2011; Yang et al., 2010). Mounting evidence of

the availability of both constructs in contemporary Taiwanese society is provided by studies from Yang (2004) and Lu (2011), and it represents the increasing influence of Western cultures on the process of societal modernization in Chinese societies. Thus, the bicultural self is conceived better as a dynamic process of constant conflict resolution and adaptation when the individual is living in a transitional society with both traditional and modern cultural systems juxtaposed. The changing view of the self in Chinese societies suggests an individual's needs include autonomy, competence and comradery which can affect an individual's intrinsic motivation (Molix and Nichols, 2013; Guntert, 2015). Thus, the bicultural self may provide a means of explaining a set of needs that must be met for intrinsic motivation to increase (Lu, Kao, Chang, Wu & Zhang, 2008). This situation suggests that modern Chinese organizations would have to make changes (e.g., implement reward systems) to fulfill their employees' needs if they want to improve organizational efficiency and productivity.

Several work-related factors have been proved to improve employees' work-related behavior, and the leader is regarded as being the most influential among these factors (Kovjanic et al., 2013). Hetland, Hetland, Andreassen, Pallesen, & Notelaers (2011) suggested the central idea of leadership processes is to fulfill employees' psychological needs, because leaders' positive role modeling, support, empowerment, and inspiration are believed to be helpful in fulfilling employees' needs. Traditional Chinese leaders tend to use authoritarian leadership, emphasizing control and authority, which stems from Confucianism and Legalism (Yang et al., 2010; Lu et al. 2012). The question this raises concerns whether authoritarian leadership is still an appropriate leadership style for Chinese workers with a bicultural self. The debate outlined here seems to suggest that a new leadership style is necessary for modern Chinese organizations. Authentic leadership has been suggested by several researchers to be the most effective leadership style (Bamford et al., 2013). Authoritarian leaders manage by control, but authentic leaders lead by being a positive role model and gaining their employees' trust. Therefore, it seems necessary to consider the changes that are needed in the structure of the Chinese self to clarify the impact of these leadership styles on the work-related behavior of Chinese employees.

### **Work Engagement**

We discussed work engagement in this research because SDT suggests that individuals will be engaged in their tasks if the associated activities satisfy their interest, which, in turn, leads to positive work outcomes (e.g., job satisfaction) (Bamford et al., 2013). Saks (2006) described work engagement as a reciprocal

interdependence of economic and socio-emotional resources between employees and an organization/supervisor. It represents a key outcome in the work domain because it has a positive relationship with job involvement, satisfaction, and commitment to the organization (Schaufeli, Taris, & Van Rhenen, 2008), and it is characterized the employees' vigor, dedication, and absorption in their work (Saks, 2006).

Leaders who are involved directly with the working lives of individuals have an important role in determining employees' level of work engagement (Bamford et al., 2013). Authentic leaders lead by building trust and respect with their subordinates, honestly presenting their real-selves and following clear values and beliefs (Schaufeli et al., 2008). Bamford et al. (2013) suggested that the conceptualization of work engagement is similar to the nature of authentic leadership, so it is reasonable to suggest that authentic leadership is related to work engagement. Several empirical studies have supported this idea, and Giallonardo, Wong, and Iwasiw (2010) found that authentic leadership was related significantly to nurses' work engagement and job satisfaction. In addition, Walumbwa, Wang, Wang, Schaubroeck, and Avolio (2010) conducted research in China and found a significantly positive relationship between supervisors' authentic leadership and work engagement. Conversely, authoritarian leaders control, emphasize absolute authority, and demand unquestioning obedience from their subordinates. Although the effects of authoritarian leadership still are not fully understood, both positive and negative effects have been reported in various studies (Chan, Huang, Snape, and Lam, 2013). However, it seems clear that the overall ethos of authoritarian leadership tends to discourage work engagement. Authoritarian leaders belittle subordinates and emphasize their shortcomings, which may damage their sense of competence and result in deviant behavior within the organization, such as withdrawing from the job to express their anger. Hence, the findings of this research suggest that authoritarian leadership may have a negative impact on an individual's work engagement.

As suggested by Lambert et al. (2012) and Chan et al. (2013), the impact of leadership on work-related outcomes may differ because of contingency factors, such as leaders' providing incentives that fulfill employees' needs, and the effectiveness of that leadership may improve. SDT also stresses the importance of satisfying employees' needs, so, we hypothesized in this research that an employee's intrinsic motivation may moderate the influence of leadership on work engagement.

### **Motivation vs. Authentic Leadership and Work Engagement**

Recently, studies focusing on the role of authentic leadership have gradually increased in both practicality and academic robustness (Avolio, Gardner, Walumbwa, Luthans, & May, 2004) due to its recognition as the fundamental foundation of all positive forms of leadership and the vital role it has in addressing issues concerning organizational and societal problems. Walumbwa, Avolio, Gardner, Wernsing & Peterson (2008) defined authentic leadership as “a pattern of a leader’s 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.” This is well-suited to self-determined motivation at the contextual level (Gagné and Deci, 2005). Thus, employees who value their need for autonomy and competence and dwell more on their independent self (Lu et al., 2012) may perform better with authentic leaders. Authentic leaders enable their employees to experience more positive emotions, handle stressors in a positive manner, and enhance their motivation and performance (Walumbwa et al., 2008), which are outcomes that support employees’ needs for autonomy and competence.

With the influx of westernized values, the concept of the bicultural-self suggests that the Chinese people are starting to pay more attention to their independent selves. Thus, this research proposes that employees who ponder their independent selves possess high intrinsic motivation. The fact that such employees value autonomy and competence works well with authentic leaders who support their employees’ needs by promoting positive psychological capacities like self-efficacy in the work environment. Hence, as a result of this research, we suggest that intrinsic motivation may encourage the positive impact of authentic leadership on employees’ work engagement. This leads to hypothesis H1 (Figure 1):

H1: Motivation moderates the relationship between authentic leadership and work engagement. High intrinsic motivation increases the positive influence of authentic leadership on work engagement.

### **Motivation vs. Authoritarian Leadership and Work Engagement**

Paternalistic leadership (PL) often is associated with an authoritative and manipulative approach. However, for many years, paternalistic leadership has been an effective leadership style in Chinese business because it provides a positive association with cultures that are rooted in Confucianism (Chan et al., 2013). One dimension of PL, i.e., authoritarianism, defines a leadership style that asserts authority

and control. In general, authoritarianism has been found to be associated negatively with subordinate outcomes, such as commitment, satisfaction with the leader, engagement, and organizational citizenship behavior (OCB) (Chan et al., 2013). It can provoke angry emotions, and subordinates can become fearful of their supervisors (Farh, Cheng, Chou, & Chu, 2006). However, some studies have found positive outcomes associated with an authoritarian leadership style, such as providing strong motivation for managers, giving them incentives to achieve goals, quick decision-making, and allowing group members to focus on performing their specific tasks without worrying about making complex decisions (Chan et al., 2013).

Chan et al. (2013) suggested that authoritarian leaders set high standards, provide direct instructions for achieving them, and expect their subordinates to comply. In these situations, leaders dominate decision-making without asking for other members' inputs in the decision-making process, withhold praise for subordinate's efforts in performing tasks, and exhibit discretionary behaviors that may benefit the organization. Some employees feel a strong sense of motivation to conform to authoritarian leaders' requirements because it satisfies the need for relatedness in intrinsic motivation. According to attachment theory (Bowlby, 1979), relatedness is essential for an individual's intrinsic motivation because an individual instinctively tries to find a secure situation, which results in the tendency to develop increased relatedness (represented by assimilation and integration of oneself into the social community) to increase their psychological security (Hudson, 2013). Bond (1986) suggested that even among the most rapidly modernizing segments of the Chinese population, there is still a tendency for people to act in accordance with and relate to the expectations of others and their social standards. Therefore, rather than following personal desires or individual attributes, these attitude tended to be suppressed and individuals can appear to be agreeable, even under the most trying of circumstances and behavior may be adjusted accordingly (Yang et al., 2010; Lu, 2011; Lu et al., 2012).

From the perspective of the Chinese bicultural self, employees who dwell on their interdependent self and possess high intrinsic motivation may work well with authoritarian leaders who support their need for relatedness. This enables individuals to feel related in terms of their relationships with others who are in the same situation (Lambert et al., 2012), and this can buffer the negative influence of authoritarian leadership on their work engagement. This leads to our hypothesis H2 (Figure 1):



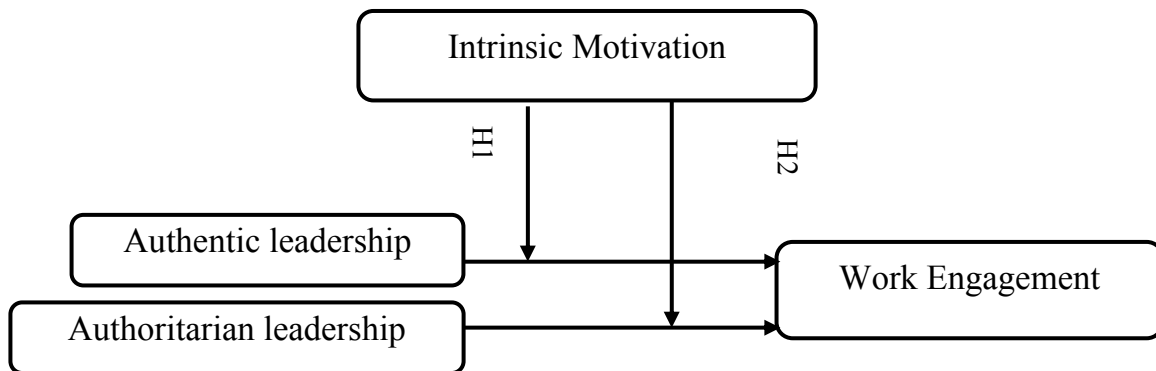


Figure 1 Hypothesized model

## METHOD

### Participants and Sampling Methods

Surveys were collected from 350 subordinate-supervisor dyad pairs from various organizations in Taiwan. Paired questionnaires were used to avoid common method variance (CMV) (Podsakoff, MacKenzie, Lee, and Podsakoff, 2003). The questionnaires were separated into two sets, one set for supervisors and one set for subordinates. The questionnaires for subordinates asked about their supervisor's leadership style and the subordinate's work motivation. The questionnaires for supervisors asked them to rate their subordinate's work engagement. Postage-paid envelopes were included in the packets for returning the questionnaires to the researchers. The snowball sampling method was used in this research, and supervisors were approached through the authors' contacts. A survey packet was delivered to each department's supervisor, and each supervisor chose one subordinate from her or his department to answer the subordinate's questionnaire.

A total of 183 subordinates (52.30% of them) were female. The average age of the 350 participating subordinates was 33.10 (SD = 10.40), and the average time the subordinates had worked in industry was 38.65 months (SD = 63.07). The minimum time on the job among the subordinates was one month, and the maximum was 263 months. There were 350 supervisors who completed the questionnaire, 64.1% of whom were males. The average time the supervisors had worked in industry was 81.39 months (SD = 106.01). The minimum time a supervisor had worked in industry was one month, and the maximum was 442 months. In addition, 65.20% of subordinates and supervisors were of the same gender with a standard deviation of 0.48.

## Measures

- **Authentic Leadership**

We used the Authentic Leadership Inventory (ALI) developed by Neider and Schriesheim (2011). The ALI consists of 16 questions that were answered by the subordinates using a five-point Likert-type scale ranging from 0 (never) to 5 (frequently). The ALI included questions such as: “My supervisor solicits feedback for improving her/his dealings with others.” A high score means that the supervisor tends to use the authentic leadership style, Cronbach’s  $\alpha$  was 0.87.

- **Authoritarian Leadership**

Authoritarian Leadership, developed by Cheng et al. (2000), consists of nine items using a six-point Likert scale, i.e., 1 (strongly disagree) and 6 (strongly agree). For example, it includes this question: “My supervisor always behaves in a commanding fashion in front of employees.” A high score means that the supervisor tends to have an authoritarian leadership style. Cronbach’s  $\alpha$  was 0.84.

- **Motivation**

The Work Extrinsic and Intrinsic Motivation Scale (WEIMS) (Tremblay, Blanchard, Taylor, Pelletier, Villeneuve, 2009) was used for this research. Participants were asked to indicate their level of agreement with 18 items, using a Likert-type scale ranging from 1 (do not agree at all) to 7 (agree completely). A single score was used, such as the work self-determination index (W-SD) that was considered to be desirable (Tremblay et al., 2009). The score reflects an individual’s relative level of self-determination. Items used in this scale included, for example, “Because I derive much pleasure from learning new things.” A positive score on this scale indicated a self-determined profile, and a negative score indicated an externally-driven profile. Cronbach’s  $\alpha$  was 0.87.

- **Work Engagement**

The supervisors were asked to indicate their subordinates’ degree of job engagement using the Utrecht Work Engagement Scale (UWES-9) developed by Schaufeli, Bakker, and Salanova (2006). The survey consisted of nine items. One item, (“When I get up in the morning, I feel like going to work”), was deleted because this should be rated by the subordinates. This measure used a six-point Likert-type scale ranging from 1 (strongly disagree) to 6 (strongly agree). One item, for example, was: “He/she is enthusiastic about her/his job.” A high score suggests that the supervisor’s rating of the subordinate’s work engagement was

high. The Confirmatory factor analysis (CFA) results indicated that the model provided an acceptable level of fit for the data ( $\chi^2 = 45.16$ ,  $df = 17$ ,  $CFI = 0.99$ ,  $NFI = 0.98$ ,  $GFI = 0.97$ ,  $RMSEA = 0.07$ . Cronbach's  $\alpha$  was 0.91.

- **Control variables**

Obedience served as the control variable of the study since authoritarianism demands unquestioning obedience from subordinates. Also, it is likely that Chinese subordinates tend to obey their supervisors have authority over them (Farh & Cheng, 2000), which could alter results during the analysis. The questionnaire used for this measure was taken from Cheng et al. (2006). The survey consisted of five items and used a six-point Likert-type scale ranging from 1 (strongly disagree) to 6 (strongly agree.) One item, for example, was: "I completely obey my supervisor's instructions." A high score suggests that subordinates possess high levels of obedience to their supervisor. Cronbach's  $\alpha$  was 0.81.

## RESULTS

### Validity of Measures

Two methods were used to test CMV. Harman's Single Factor Test was used to examine the unrotated factor solution to determine the number of factors that were necessary to account for the variance. The first factor emerged from the factor analysis explaining only 18.91% of the variance. The Common Latent Factor Method also was used to test CMV. The common variance from the analysis was less than 30%, and no cross loadings occurred. Most of the factor correlations were less than 0.30, with absolute correlations of the constructs ranging from 0.01-0.34.

Confirmatory Factor Analysis (CFA) confirmed the validity of the factors (convergent and discriminant) of the five constructs, as presented in Table 1. Discriminant validity was examined further by using Anderson and Gerbing's (1988) suggestion that the parameter estimate for two factors be constrained to 1 (constrained model) and comparing it to a model where this parameter is freely estimated (unconstrained model). The results showed that CMIN of the unconstrained model were all significant for this study, and discriminant validity was supported.

Table 1 Means, Standard Deviations, Internal Consistency, Correlations between Study Variables, and Validity

Variable	M	SD	$\alpha$	1	2	3	4	5	CR	AVE	MSV	ASV
1. Same Gender	1.35	.48										
2. Obedience	5.40	.89	.81	.11*					.84	.57	.22	.06
3. Authentic Leadership	4.81	.93	.87	-.09	.07				.80	.51	.07	.04
4. Authoritarian Leadership	3.71	1.14	.84	.09	.04	-.38**			.78	.32	.07	.03
5. Motivation	4.81	5.12	.85	.05	.15**	.20**	-.23**		.99	.99	.06	.03
6. Work Engagement	5.38	.94	.91	.05	.55**	.18**	-.12*	.32**	.89	.55	.22	.08

Note: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.00$

The results provided in Table 1 show that the values of Composite Reliability (CR) were greater than 0.70. The results also showed convergent validity where the CR values were greater than the Average Variance Extracted (AVE) values and that the AVE values were greater than 0.50, except for the Authoritarian construct. The results also proved discriminant validity where the maximum shared variance (MSV) and average shared squared variance (ASV) values were less than the AVE values (Hair, Black, Babin, & Anderson, 2010).

Bagozzi and Yi (1988) suggested that AVE latent variables should be greater than 0.50, but reaching 0.50 or more of the AVE means that the average of all the factor loadings was greater than 0.71, which is not very easy to achieve. For example, if there were five potential constructs, where three or four of the latent variables AVE values can reach 0.50 or more, and the AVE value of the other potential variables reach at least 0.30 or 0.40, the standard generally can be accepted (Bagozzi and Yi, 1988). Hair et al. (2010) suggested that all of the standardized factor loadings should be greater than 0.50, which means that AVE should be 0.502. The average AVE for this study was approximately 0.59, which suggested that approximately 59% of results can be accounted for by the measures.

Table 1 also provides descriptive statistics for the measures in this study and the correlations between all of the variables.

### Model Fit Test

Confirmatory Factor Analysis was conducted to test the model's fit. In this study, we analyzed five models, and the empirical results are shown in Table 2. The results

indicated that the theoretical model showed good overall measurement model fit with all factor loadings being statistically significant, i.e.,  $\chi^2(238) = 369.96$ ; GFI = 0.92; AGFI = 0.90; RMSEA = 0.04; PCLOSE = 0.99; and HOELTER = 291.

Table 2 Fit Indices of The Proposed Model

Models	CMIN/df	GFI	AGFI	RMSEA	HOELTER
Null Model	4.31	.55	.52	.10	95
One-Factor	4.47	.55	.51	.10	91
Two-Factor (Leadership and Motivation)	4.29	.55	.52	.09	95
Multiple-Factor (Motivation, Leadership and Work Engagement)	4.66	.69	.65	.10	92
Theoretical Model	1.55	.92	.90	.04	291

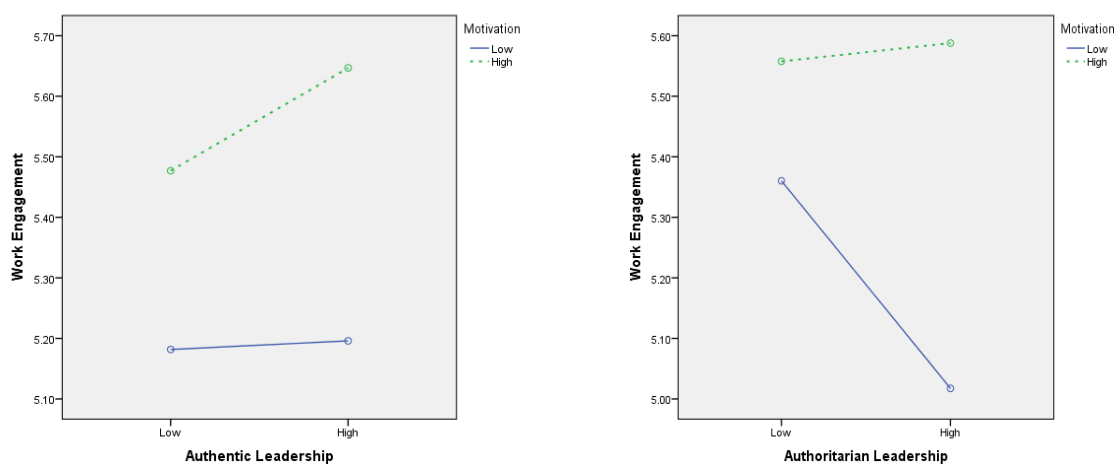
### Hypothesis Testing

Hierarchical regression analyses were used to examine the effect of authentic and authoritarian leadership styles on work engagement and whether motivation moderates the leadership style-work engagement relationship. To enable the exploration of moderation effects in this study, all variables were mean-centered, and hierarchical regression analyses were performed based on Baron and Kenny (1986) in testing moderation effects.

For this study, the moderation analysis was performed in three steps, and the interactions that controlled obedience, authentic, authoritarian leadership style, and work engagement were assessed. The results indicated that authentic ( $B = 0.18$ ,  $p < 0.001$ ) and authoritarian leadership ( $B = -0.11$ ,  $p < 0.001$ ) significantly affected work engagement. The results also indicated that motivation significantly affected work engagement ( $B = 0.21$ ,  $p < 0.001$ ). Furthermore, authentic leadership style and motivation interaction were significant ( $B = 0.10$ ,  $p < 0.001$ ) as well as authoritarian leadership style and motivation interaction ( $B = 0.11$ ,  $p < 0.001$ ). The results indicated that “motivation” appeared to have a moderating effect on the relationship between the two leadership styles, i.e., authentic and authoritarian, and work engagement.

Table 3 Regression Analyses of Moderating Effect

Variables entered	STEPS		
	Work Engagement		
	1	2	3
Obedience	.67***	.63***	.62***
Authentic Leadership	.18***	.10	.04
Authoritarian Leadership	-.11***	-.14**	-.17***
Motivation		.21***	.21***
Authentic*Motivation			.10***
Authoritarian*Motivation			.11***
AdjR <sup>2</sup>	.29	.32	.33
ΔR <sup>2</sup>	.29***	.03***	.01***



Note: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

Figure 2 Moderating Effect of Intrinsic Motivation on Leadership Style towards Work Engagement

Figure 2 shows the moderating effect of motivation on the relationship between authentic and authoritarian leadership towards work engagement. The graph illustrates that employees who have high intrinsic motivation have high levels of engagement at work when they have authentic leaders. This means that authentic leaders are effective in increasing employees' work engagement only when the employees possess high motivation to do work-related tasks. If employees have low motivation, the authentic leader's effectiveness towards work engagement is not significant. In the case of authoritarian leadership, highly motivated employees, increase their work engagement when they have authoritarian leaders, but only to a minimum extent. In contrast, low-motivated individuals exhibited lower levels of work engagement when they had

authoritarian leaders. This means that authoritarian leaders are not effective in increasing an employees' work engagement when the employees are not motivated to do work-related tasks. It is only when employees were highly motivated that we observed increases in the level of work engagement with authoritarian leaders.

## DISCUSSION

This study provided useful insights regarding the role of motivation in determining the effectiveness of authentic and authoritarian leadership styles toward work engagement. The research makes a significant contribution to the leadership effect on work outcomes and to the growing literature of studies concerning the phenomenon of biculturalism found in Chinese society. It also provides additional insight regarding the role of motivation as a relevant construct, which should be included as an integral part of leadership style effect models.

In SDT, the satisfaction of the three needs, i.e., autonomy, competence, and relatedness, was assumed to represent the underlying motivational mechanism that influences and directs people's behaviors (Deci & Ryan, 2000). The results of the study indicated that, when the needs of autonomy, competence, and relatedness (which are related to intrinsic motivation) are supported by leaders, employees respond favorably by exhibiting high levels of work engagement in work-related tasks irrespective of whether their supervisors are authentic or authoritarian. This highlights the existence of the bicultural self in Chinese society, wherein both types of self, the independent and the interdependent self, coexist.

Furthermore, the results indicated that motivation moderates the relationship between both types of leadership towards work engagement. First, authentic leadership generates high employee work engagement when employees are highly motivated. If employees have low motivation, the results indicated that their level of work engagement increased only a minimum amount. This suggested that authentic leadership can optimize an employee's work engagement only when employees are highly motivated. This adds to a growing number of publications on the positive effects that 'Authentic Leaders' have on work outcomes (Guntert, 2015).

However, in the case of authoritarian leadership, highly motivated employees showed increasing levels of work engagement despite working for an authoritarian leader. However, an adverse reaction was observed when employees were not motivated. This suggests that authoritarian leadership may cause more harm to an employee's work engagement if employees are not motivated to do work-related tasks. Emphasis should be placed on the importance of having employees who are highly motivated to reap some positive effects of authoritarian leadership towards

employee work engagement. This result contributes to the literature on authoritarian leadership and its effect on work outcomes and the need to emphasize the role of motivation in determining leadership effectiveness.

The results also showed that there was a direct, positive effect of motivation on work engagement, which was similar to the findings of Schaufeli and Bakker (2004). In addition, having a higher motivational level is helpful in optimizing the positive effect of authentic leadership towards work engagement and, more importantly, counteracting the negative effect of authoritarian leadership towards work engagement. Therefore, everyone is likely to benefit from satisfying the three needs that relate to their intrinsic motivation. Deci et al. (2001) and Vansteenkiste, Lens, Soenens, and Luyckx (2006) provided evidence of the importance of intrinsic motivation and the satisfaction of those needs in culturally diverse samples. Apparently, motivation correlates positively with work outcomes (satisfaction, engagement, and low burnout) and optimal performance, because it is conducive to satisfying the three needs related to intrinsic motivation (Gagné & Deci, 2005; Van den Broeck, Vansteenkiste, & De Witte, 2008).

Thus, highly motivated individuals represent the development of the bicultural self in Chinese society, wherein their level of performance and engagement is improved when working with both Western, authentic leadership and traditional Chinese, authoritarian leadership styles.

### **Theoretical and Managerial Implications**

With increasing globalization in today's Chinese business environment, it is important for management to determine all factors that affect employees' behaviors. This research gives insight on the role of motivation as a moderator when determining the effectiveness of leadership styles in enhancing work engagement. It is important to understand that the levels of employees' motivation can influence the effectiveness of the leadership style and can affect the level of employee work engagement, regarding the level of employee work engagement. It is essential to understand what is important to a bicultural workforce to be able to tailor leadership styles to get the best from that workforce.

An authentic leadership approach is likely to encourage good outcomes, attitudes, and levels of work engagement from subordinates for whom autonomy and independence is important. A more traditional authoritarian leadership approach may work better for employees whose motivation stems from their need for relatedness and interdependency with others, especially for those who possess high authority among



them. They tend to emphasize the maintenance of good relationships and being able to cope with the demands put upon them to demonstrate their levels of work engagement. Organizations that can develop techniques that allow employees to be led in the most appropriate way are most likely to be able to optimize the work behavior and outcomes of their employees. Authentic leaders may be able to enhance levels of work engagement by assisting employees to identify their goals, help to advance their careers, and offer advice when needed (Schaufeli & Salanova, 2007), while authoritarian leaders may be able to enhance levels of work engagement by practicing authority in a proper manner so as to avoid negative effects of employees' attitudes that can often undermine the levels of work motivation in a company's workforce.

The results of this study indicate that organizations can realize significant benefits from hiring employees with high intrinsic motivation to achieve optimal performance in their work and improve leader-subordinate relationships in the organization. Consequently, companies will reap these benefits due to improved performances of their employees and the creation of a healthy work environment for both leaders and subordinates in the fast-paced business world.

### **Limitations and Recommendations**

One limitation identified in this study relates to the use of self-reported survey data, which raises concerns regarding CMV. Procedural remedies were used in this study to minimize this risk as recommended by Podsakoff et al. (2003). Subordinate-supervisor dyad questionnaires were used so that respondents would not be able to provide retrospective accounts of their attitudes, perceptions and/or behaviors. We also measured different constructs with different scale formats to reduce the probability that participants would use shortcuts and provide inconsistent answers. Two additional types of analyses also were used to ensure that CMV didn't occur. Research in the future could improve the study by gathering data from a more diverse range of sources and extending the scope of the study to a sphere of influence beyond that of the dyad questionnaires that were used. Hence, data also could be obtained from their co-workers or even customers, by investigating their opinions about levels of motivation and perceived engagement among employees.

Another way to improve the research quality would be to use a mixed-methods approach, i.e., combining quantitative and qualitative methods to identify the respective authoritarian or authentic leadership styles used by supervisors. In addition, the presence of mediating variables, such as trust and communication quality, between leadership and work-related outcomes (both attitudinal and behavioral) also could be identified.

Another limitation relates to the use of a primarily cross-sectional research design. As a result, implications of the causal relationships suggested in this research are supported by the findings that were proposed by theoretical links. Future research could use longitudinal studies, which would allow us to confirm how leaders develop relationships with their employees and to analyze the results of the intermediary system in employees' work engagement. Although previous research has indicated that obedience is enhanced by authoritarian leadership, work attitude may be adversely affected (Chan et al., 2013). In this research, it was found that obedience had a significant relationship with employees' work attitudes, such as motivation and work engagement, so this research already was controlled for obedience during the analysis.

While our results showed and supported the effects of authoritarian and authentic leadership on subordinates' manners and behaviors in the workplace, it is worth emphasizing that our hypothesized relationships focused on the leadership approach in general. It is recommended that future research target both authentic and authoritarian leadership and investigate their nuances and interrelated outcomes. Our findings focused on the global construct of authentic and authoritarian leadership, motivation, and work engagement. Specific dimensions that also deserve attention could be explored in future research, and other relevant variables, such as personality, psychological aspects, or individual traditionalism/modernity, could be assessed.

Regardless of the notations above, the expectations are that this study, in addition to testing the known key workplace relationships, will add to the body of research on the roles of authentic and authoritarian leadership in the workplace. In addition, the scope of the study could be extended to include other potential psychological variables that could offer other valuable insights. The perceived integrity of the leader and 'leading by example' are two pertinent examples of this. This study also identified the role of biculturalism in determining the effectiveness of traditional and modern leadership styles in the workplace, and it highlighted how employees' underlying, self-determined work motivation can act as an intervening variable between leadership style and work engagement.

## REFERENCES

- Anderson, J., & Gerbing, D. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411-423. <http://dx.doi.org/10.1037/0033-2909.103.3.411>
- Avolio, B. J., Gardner W. L., Walumbwa, F. O., Luthans, F., & May, D. R. (2004). *Unlocking the Mask: A Look at the process by which authentic leader's impact*

- follower attitudes and behaviors. *Leadership Quarterly*, 15(6), 801-823. <http://dx.doi.org/10.1016/j.leaqua.2004.09.003>
- Bagozzi, R., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74-94. <http://dx.doi.org/10.1007/BF02723327>
- Bamford, M., Wong, C. A., & Laschinger, H. (2013). The influence of authentic leadership and areas of worklife on work engagement of registered nurses. *Journal of Nursing Management*, 21(3), 529-540. <http://dx.doi.org/10.1111/j.1365-2834.2012.01399.x>
- Baron, R. M., & Kenny, F. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 6, 1173-1182. <http://dx.doi.org/10.1037/0022-3514.51.6.1173>
- Bond, M. H. (1986). *The Psychology of the Chinese people*. New York: Oxford University Press
- Bowlby, J. (1979). *The Making and Breaking of Affectional Bonds*. London: Tavistock.
- Chan, S. C. H., Huang, X., Snape, E., & Lam, C. K. (2013). The Janus face of paternalistic leaders: Authoritarianism, benevolence, subordinates' organization-based self-esteem, and performance. *Journal of Organizational Behavior*, 34, 108-128. <http://dx.doi.org/10.1002/job.1797>
- Cheng, B. S., Chou, L. F., & Farh, J. L. (2000). A triad model of paternalistic leadership: The constructs and measurement. *Indigenous Psychological Research in Chinese Societies*, 14, 3-64
- Cheng, B. S., Chou, L. F., Huang, M. P., Farh, J. L., & Peng, S. (2003). A triad model of paternalistic leadership: Evidence from business organizations in Mainland China. *Indigenous Psychological Research in Chinese Societies*, 20, 209-252.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. New York, NY: Plenum Press.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268. [http://dx.doi.org/10.1207/S15327965PLI1104\\_01](http://dx.doi.org/10.1207/S15327965PLI1104_01)
- Farh, J. L., & Cheng, B. S. (2000). A cultural analysis of paternalistic leadership in Chinese organizations. In J. T. Li., A. S. Tsui, & E. Weldon (Eds.), *Management and Organizations in the Chinese Context*, 84-127. London: Macmillan
- Farh, J. L., Cheng, B. S., Chou, L. F., & Chu, X. P. (2006). *Authority and benevolence: employees' responses to paternalistic leadership in China*. In: A. S. Tsui, Y. Bian,

- & L. Cheng (Eds.), *China's domestic private firms: Multidisciplinary perspectives on management and performance*, 230-260. New York: Sharpe.
- Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26, 331-362. <http://dx.doi.org/10.1002/job.322>
- Giallonardo, L., Wong C., & Iwasiw C. (2010). Authentic leadership of preceptors: predictor of new graduate nurses' work engagement and job satisfaction. *Journal of Nursing Management*, 18, 993-1003. <http://dx.doi.org/10.1111/j.1365-2834.2010.01126.x>
- Griffin, M. A., & Neal, A. (2000). Perceptions of safety at work: A framework for linking safety climate to safety performance, knowledge, and motivation. *Journal of Occupational Health Psychology*, 5, 347-358. <http://dx.doi.org/10.1037/1076-8998.5.3.347>
- Guntert, S. T. (2015). The impact of work design, autonomy support, and strategy on employee outcomes: A differentiated perspective on self-determination at work. *Motivation and Emotion*, 39(1), 74-87. <http://dx.doi.org/10.1007/s11031-014-9412-7>
- Hair, J. F., Black, W. C., Babin, J. B., & Anderson, R. E., (2010). *Multivariate Data Analysis. (7th ed.)* Upper Sadle River, NJ: Prentice Hall.
- Hamaguchi, E. (1985). A contextual model of the Japanese: Toward a methodological innovation in Japan studies. *Journal of Japanese Studies*, 77, 289-321. <http://dx.doi.org/10.2307/132562>
- Hetland, H., Hetland, J., Andreassen, C. S., Pallesen, S., & Notelaers, G. (2011). Leadership and fulfillment of the three basic psychological needs at work. *Career Development International*, 16 (5), 507-523. <http://dx.doi.org/10.1108/13620431111168903>
- Hudson, D. L. (2013). Attachment theory and leader-follower relationships. *The Psychologist-Manager Journal*, 16(3), 147-159. <http://dx.doi.org/10.1037/mgr0000003>
- Kovjanic, S., Schuh, S. C., & Jonas, K. (2013). Transformational leadership and performance: An experimental investigation of the mediating effects of basic needs satisfaction and work engagement. *Journal of Occupational & Organizational Psychology*, 86(4), 543-555. <http://dx.doi.org/10.1111/joop.12022>
- Lambert, L. S., Teppe, B. J., Carr, J. C., Holt, D. T., & Barelka, A. J. (2012). Forgotten but not gone: An examination of fit between leader consideration and

- initiating structure needed and received. *Journal of Applied Psychology*, 97(5), 913-930.  
<http://dx.doi.org/10.1037/a0028970>
- Lu, L. (2011). The double slump of traditional - modern self in modern Chinese. *Indigenous Psychological Research in Chinese Societies*, 36, 155-168.
- Lu, L., Chang, T. T., & Chang, Y. Y. (2012). The meaning of work and family and its role in coping with work and family conflict: Practicing the Chinese bicultural self. *Indigenous Psychological Research in Chinese Societies*, 37, 141-189.
- Lu, L., Kao, S. F., Chang, T. T., Wu, H. P., & Zhang, J. (2008). The individual- and social- oriented Chinese bicultural self: A sub-cultural analysis contrasting mainland Chinese and Taiwanese. *Social Behavior & Personality*, 36, 337-346.  
<http://dx.doi.org/10.2224/sbp.2008.36.3.337>
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: implications for cognition, emotion and motivation. *Psychological Review*, 98 (2), 224-253.  
<http://dx.doi.org/10.1037/0033-295X.98.2.224>
- Meyer J. P., & Gagné, M. (2008). Employee engagement from a self-determination theory perspective. *Industrial and Organizational Psychology*, 1, 60-62.  
<http://dx.doi.org/10.1111/j.1754-9434.2007.00010.x>
- Molix, L. A., & Nichols, C. P. (2013). Satisfaction of basic psychological needs as a mediator of the relationship between community esteem and wellbeing. *International Journal of Wellbeing*, 3(1), 20-34.  
<http://dx.doi.org/10.5502/ijw.v3i1.175>
- Neider, L. L., & Schriesheim, C. A. (2011). The Authentic Leadership Inventory (ALI): Development and empirical tests. *Leadership Quarterly*, 22, 1146-1164.  
<http://dx.doi.org/10.1016/j.leaqua.2011.09.008>
- Podsakoff, P., MacKenzie S., Lee, J. Y., & Podsakoff, N. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879-903.  
<http://dx.doi.org/10.1037/0021-9010.88.5.879>
- Ryan, R. M., & La Guardia, J. G. (2000). What is being optimized over development? A self-determination theory perspective on basic psychological needs across the life span. In S. Qualls & R. Abeles (Eds.) *Dialogues on Psychology and Aging*, 145-172. Washington, DC: American Psychological Association.
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21, 600-619.  
<http://dx.doi.org/10.1108/02683940610690169>

- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25(3), 293-315. <http://dx.doi.org/10.1002/job.248>
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement*, 66, 701-716. <http://dx.doi.org/10.1177/0013164405282471>
- Schaufeli, W. B. & Salanova, M. (2007). Work engagement: An emerging psychological concept and its implications for organizations. In S.W. Gilliland, D. D. Steiner, and D. P. Skarlicki (Eds), 135-177, *Research in social issues in management, Information Age Publishers*. Greenwich: CT .
- Schaufeli, W. B., Taris, T. W., & Van Rhenen, W. (2008). Workaholism, burnout, and engagement: Three of a kind or three different kinds of employee well-being? *Applied Psychology: An International Review*, 57, 173-203. <http://dx.doi.org/10.1111/j.1464-0597.2007.00285.x>
- Tremblay, M. A., Blanchard, C. M., Taylor, S., Pelletier, L. G., & Villeneuve, M. (2009). Work extrinsic and intrinsic motivation scale: Its value for organizational research. *Canadian Journal of Behavioural Science/Revue*, 41, 213-226. <http://dx.doi.org/10.1037/a0015167>
- van den Broeck, A., Vansteenkiste, M., De Witte, H., & Lens, W. (2008). Explaining the relationships between job characteristics, burnout and engagement: The role of basic psychological need satisfaction. *Work & Stress*, 22, 277-294. <http://dx.doi.org/10.1080/02678370802393672>
- Vansteenkiste, M., Lens, W, Soenens, B., & Luyckx, K. (2006). Autonomy and relatedness among Chinese sojourners and applicants: Conflictual or independent predictors of well-being and adjustment? *Motivation and Emotion*, 30, 273-282. <http://dx.doi.org/10.1007/s11031-006-9041-x>
- Walumbwa, F., Avolio, B., Gardner, W., Wernsing, T., & Peterson, S. (2008). *Authentic leadership: Development and validation of a theory-based measure, Management Department Faculty Publications*, Retrieved from July 16, 2014, from <http://digitalcommons.unl.edu/managementfacpub/24>.
- Walumbwa, F., Wang, P., Wang, H., Schaubroeck, J., & Avolio, B. (2010). Psychological processes linking authentic leadership to follower behaviours. *Leadership Quarterly*, 21, 901-914.
- Yang, K. S. (2004). A theoretical and empirical analysis of the Chinese self from the perspective of social and individual orientation. *Indigenous Psychological Research in Chinese Societies*, 22, 11-80.

Yang, K. S., Liu, Y. L., Chang, S. H., & Wang, L. (2010). Constructing a Theoretical Framework for the Ontogenetic Development of the Chinese Bicultural Self: A Preliminary Statement. *Chinese Journal of Psychology*, 52(2), 113-132.

