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A cross-cultural empirical analysis between the US and Taiwan: Perceived leadership styles and organizational commitment at Certified Public Accountant (CPA) firms

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This study investigates the effects of different leadership styles on organizational commitment in both the US and Taiwan along with CPA firms. The study sample consists of 137 respondents from among the Big-Four in the US and 247 respondents from the Big-Four in Taiwan. In addition to both promising future and royalty dimensions in organizational commitment, Americans are concerned with joy in their work while the Taiwanese emphasize policy recognition. Furthermore, Americans are identified as favoring supportive leadership while the Taiwanese prefer supportive and participative leaderships. Among other variables that influence organizational commitment excluding gender and education level, Americans have significant relationships to job field, age, and whether a CPA license is held; on the other hand, Taiwanese care about the working tenure and job level.

Key words: Certified Public Accountant (CPA) firms, organizational commitment, perceived leadership style.

INTRODUCTION

Accountants are important contributors to social and economic progress in terms of reliable information providers and financial reporting preparers (Keller et al., 2007). The demand for accounting information in an international context surges and the interactions between accountants in different countries will increase in number and in importance (Jeffrey et al., 1996). The original Big-Six US certified public accountant (CPA) firms become the Big-Five following the Price Waterhouse merger with Coopers and Lybrand in 1998.

After Arthur Andersen was forced to close by the US authorities in August 2002 due to Enron affairs, the current Big-Four CPA firms remain. As CPA firms continue this merger trend, the competition has become more intensive (Berton, 1995; Schloemer and Schloemer, 1997). The operations of a CPA firm are more challenging and complicated (Banker et al., 2003).

The mergers and acquisitions have raised the leadership behavior issue. Furthermore, the high personnel turnover rate in the CPA firms has caused waste and concern. It is imperative to retain employees as a primary concern in the intellectual professional industry such as CPA firms (Zheng et al., 2010). The high turnover among CPA firms is evidenced by the fact that 80% of new professionals hired leave before five years of tenure (Egan, 1985).

The most important factor in the turnover is the organizational commitment (OC hereafter) which can lead to a low turnover (Jaramillo et al., 2005; Parker and Kohlmeyer, 2005; Wu and Cavusgil, 2006; Wu and Norman, 2006; Chang et al., 2007; Anvari et al., 2010; Lin et al., 2010; Ponnu and Chuah, 2010).

Cohen (2007) proposes that increasing and maintaining OC at a higher level enable positive employee's' work behavior, not just suppress their turnover intentions. The impact of the work environment on employee attitudes and behavior has become a serious concern for CPA firms (Aranya and Ferris, 1984). Also, after Taiwan joined World Trade Organization (WTO), its international business interactions have mushroomed. This study

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proposes a comparative analysis for these antecedents to OC between US and Taiwan on CPA firms. The leadership style (LS hereafter) is considered to be particularly important in achieving organizational goals in CPA firms (Otley and Pierce, 1995; Benjamin and Flynn, 2006; Hambley et al., 2007; Cohen, 2007; Tsai et al., 2010; Wang et al., 2010). Therefore, the main purpose of the study is to conduct a comparison on the relationship between LS and OC for each country.

This study attempts to answer the following questions: Does subordinates' perception of their managers' LS affect their OC to the CPA firm in each country? Does there exist significant discrepancy on LS, in relation to OC, and what are the causal relationship between LS and OC between the US and Taiwan?

The study contributes to the literature twofold. First, this research contributes primarily in assessing the LS impact to OC. The identification of the specific LS would lead imperative OC consequence, especially for professional CPA firms, would provide insight for CPA managers seeking to improve firm operating performance.

Second, this study provides additional empirical comparative evidence on the LS impact to OC between US and Taiwan. While international M and A trend surges, such cross-cultural interaction and cooperation would be a critical issue for managers as guideline. As such, the culture outcomes for developing countries are different from those of developed countries.

From the human resource strategy management aspect, this study identifies the knowledge of LS and its alignment with OC. The research takes into consideration the multi-dimensional nature of both LS and OC in examining the one-to-one relationship between these two factors. Managers have to emphasize the proper dimensions of LS to match their subordinates' focus and develop specific sets. More specifically, the primary objective of this study is to investigate how different LS link with OC.

LITERATURE REVIEW

Organizational commitment

Mowday et al. (1979: 224) define OC as "a more active and positive attitude toward the organization". This concept is based on three factors: the acceptance of the organization's goals and values (identification), the willingness to invest effort on behalf of the organization (involvement), and the importance attached to keeping ones membership in the organization (loyalty) (Bogler and Somech, 2004).

In this study, the core theory of OC is based on Mowday et al. (1979) for the following reasons: 1) providing an operational and amenable empirical study of OC (Mowday et al., 1982); 2) covering both attitudinal aspects and behavioral aspects of OC (Mowday et al., 1982); and 3) various studies (Keegan and Hartog, 2004; Bogler and Somech, 2004; Parker and Kohlmeyer, 2005; Riketta, 2005; Wu and Norman, 2006; Lambert et al., 2007) utilize an organizational commitment questionnaire (OCQ) that is facilitated and developed by Mowday et al. (1979).

The influential factors for organizational commitment

It has been suggested that OC was significantly related to personal attributes, job characteristics, and work experience (Mowday et al., 1982). The personal attributes that affect OC including: age, tenure, education, and gender. Empirically, OC has been identified as positively related to both age and tenure (Beck and Wilson, 2006), education (Still, 1983), and gender (Angle and Perry, 1981; McColl-Kennedy and Anderson, 2005).

Furthermore, both job characteristics (that is, job scope and role overload) (Johnston et al., 1990) and work experience (that is, the organizational dependability, personal importance to the organization, leadership style, social involvement, and work relationship) (McColl-Kennedy and Anderson, 2005; Moss et al., 2007; Tsai et al., 2010) are antecedents of OC.

Consequently, the demographic variables (such as gender, age, education), working tenure, job position, job level, and holding professional certification were investigated in this study to explore their relationships to OC.

Leadership style

Research has also shown a consistent correlation between leadership style and OC (Shim et al., 2002; Wong and Law, 2002; McColl-Kennedy and Anderson, 2005; Tsai et al., 2010). The path-goal theory of leadership stands as the premier theory of dyadic supervision in the leadership field (Evans, 1996; Jermier, 2006; Schriesheim et al., 2006).

This theory not only concerns relationships between formally appointed superiors and subordinates in their day-to-day functioning but also deals with how formally appointed superiors affect the motivation and satisfaction of subordinates (House, 1996). More specifically, pathgoal identified four distinct LSs: instrumental leadership; supportive leadership; participative leadership; and achievement-oriented leadership (House, 1971; House and Dressler, 1974).

It focuses on how leaders influence their subordinates' perceptions of their work goals, personal goals, and paths to goal attainment. It suggests that a leader's behavior "is motivating or satisfying to the degree that the behavior increases subordinates goal attainment and clarifies the paths to these goals" (House and Dessler, 1974: 81, 82).

The path-goal theory predicts that the impact of the leader behaviors on subordinate criterion variables will be

moderated by several environmental and subordinate characteristics (Podsakoff and MacKenzie, 1995). Most path-goal theory applications concentrate on exploring relationship between leadership behaviors (for example, consideration and initiating structure) and out-come measures (for example, satisfaction) while studying the impact of different moderator variables (such as task structure) (Schriesheim and Neider, 1996).

This study applies the perceived leadership behavior scale (PLBS) (House and Dessler, 1974; Teas, 1981; Jiambalvo and Pratt, 1982; Kohli, 1989) based on the path-goal leadership style to test the relationship with OC in CPA firms in both the US and Taiwan.

Organizational commitment and leadership studies related to accountants

Capelle (1979) proposes that CPA firms require an intelligence system to be aware of changes in the work environment and take appropriate defensive action within the workplace. Other researchers have suggested that CPA firms should pay attention to OC (Ameen et al., 1995; Shamis and Lewandowski, 1996; Lenk and Donnelly, 1998) and leadership (Larson and Holdeman, 1994; Lenk and Donnelly, 1998; Thomas, 1998) for business survival.

Aranya et al. (1984) examine OC, professionalorganizational conflict, and satisfaction with reward among Canadian Chartered Accountants and consequently found that the OC of partners and sole practitioners was higher than their professional commitment. Collins and Seiler (1988) studied organizational loyalty among accountants and found that the so-called 'side bets effect' was important to maintaining and increasing loyalty. OC is in large part determined by the existing network of personal investments and attraction (Collins and Seiler, 1988). The greater the number of 'side bets', the higher individual's the OC in the accounting-auditing environment would be.

Collins (1993) investigates stress and departure factors for gender differences. The degree of stress experienced by women accountants might be greater than male colleagues. The accumulated effects of stress from both inside and outside the firm may encourage women in CPA firms to leave the profession in pursuit of other employment (Collins, 1993).

Cluskey and Vaux (1997) examine the possible stressrelated consequences of poor vocational fit. The 188 accountants sampled and 40% of respondents met Holland's (1985) criterion for vocational misfit. The poor vocational fit is significantly associated in correctional analysis with job dissatisfaction, low self-esteem, and turnover.

Fogarty (1994) examines the work experience, including OC, with demographic variables and organizationally conferred statuses among CPAs. Older individuals are more likely to perceive their jobs as possessing the desired job characteristics but age was not related to perceptions of role stress. Moreover, females have stronger intentions of terminating employment with CPA firms. Individuals who have been staying in a firm longer seemed to be more satisfied, more committed, and less likely to leave.

METHODOLOGY

Data collection procedures

The samples are collected from selected Big-Four CPA firms in Florida, USA and Taiwan. By checking the yellow pages, the telephone numbers of the Big-Four CPA firms in Florida, and Taiwan are obtained. Telephone contact is used to determine the voluntary participants, who are identified prior to mailing out the questionnaires. Three of the Big-Four CPA firms in Florida and four CPA firms in Taiwan agree to participate. The sample consisted of 370 in the US and 430 in Taiwan.

Measurements and scales

The demographic information includes: gender (Hull and Umansky, 1997; Glover et al., 2000; Keller et al., 2007), age and education level (Keller et al., 2007), post-graduate education and job level (Jeffrey et al., 1996), job field and working tenure (Keller et al., 2007), and licenses held. The licenses held information is asked to validate the characteristics of each CPA firm and to control the variables influencing for the relationship between LS and OC.

Leadership style is measured by House and Dessler's (1974) perceived leadership behavior scale (PLBS) with a 7-point Likert scale ranging from 1 (never) to 7 (always).

Organizational commitment construct is measured by the organizational commitment questionnaire (OCQ) (Mowday et al., 1979) with a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Analytical method for survey information

Statistical analysis methods (that is, factor analysis and regression analysis) would be implemented respectively. In order to avoid the influence from individual factors such as gender, age, education level, post-graduate education, job level, job field, working tenure, or license held for the regression analysis, the individual demographic information is treated as a control variable, the LS variables is used as an independent variable, and the OC variable as a dependent variable. The regression analysis is thus tested the direction and significance levels of the variables.

RESULTS

The target samples are the Big-Four CPA firms' employees in American and Taiwan. There are 370 survey distributions in America with 139 returned and 2 invalid surveys showing a return rate 37.56%. There are 430 survey distributions in Taiwan with 266 returned and 19 invalid surveys, showing an effective return rate of 57.44%.

According to Nunnally (1978), a Cronbach's result of 0.7 is considered reliable. In the present study, the Cronbach's α is found to be 0.91 in America and 0.87 in

Taiwan. The reliability in this study is thus acceptable. Regarding the validity issue, the study refers to the literature about the OC and LS, and to the current trends through expert interviews, to design this questionnaire. Opinions are requested on question syntax and meanings to reach an adequate content validity (Kerlinger, 1986). With regard to the external validity degree, the questionnaires are sent to the three voluntary CPA firms in America and four voluntary CPA firms in Taiwan with 37.56 and 57.44% return rates, respectively, which suggest a sufficient acceptance. These three validity elements comprising content validity, construct validity and external validity, for the study are all deemed to have reached a reasonable degree of acceptability.

In order to improve the quality of the indicators, factor analysis is applied to the data in two steps. Firstly, the Kaiser-Meyer-Olkin (KMO) analysis is used to assess the measure of sampling adequacy (MSA) of the aggregate and individual variables. The MSA analysis shows the value of each variable after controlling the others. Factor analysis can only be performed when the MSA is higher than 0.5 and where there are common elements among the variables (Kaiser 1970; Kaiser and Rice 1974). An indicator would only be selected when its factor loading is higher than 0.5.

The individual measurement and aggregate measurement for those indicators can be expressed as communality. This study retains and analyzes the variables with communality higher than 0.5. If the variable factor loading and communality does not reach the critical value, the variable would be eliminated and the next factor analysis that will be used to perform the condition would reach the critical value (Zaltman and Burger 1975; Hair et al., 1998).

Factor analyses among Americans

Organizational commitment (OC)

In the first factor analysis, the aggregate KMO is 0.899 and each individual statement has a KMO value greater than 0.8. Then the varimax of the orthogonal rotation is used for rotation method. The communalities of the first and seventh statements are found to be 0.4368 and 0.4648, respectively. Therefore, the first and seventh statements are eliminated as they are not over 0.5.

The second factor analysis for OC in the US firms is as shown in Table 1a. All the individual statement KMOs are over 0.8. By using the varimax method, there are found to be three factors with KMO values over one, therefore, these three factors (OCF1, OCF2 and OCF3) are kept in this study. As provided in Table 1a, the Eigenvalue of the first, second and third factors are 6.156, 1.214 and 1.113, respectively. The cumulated explained variance percentage is 65.257%.

This study identifies these three dimensions of OC as sense of belonging, promising future, and loyalty (OCF1,

OCF2 and OCF3), and their factor loadings shown in Table 1a.

Perceived leadership styles

Three dimensions were classified thus:

(a) Instrumental leadership style (IL): The individual statement KMOs are over 0.8. By using the varimax method, there are two factors with value over one, therefore, the third factor is eliminated. According to Table 1b, the cumulated explained variance percentage is 58.8%. This study identifies these two dimensions of instrumental as standards-oriented and instructional (IL1 and IL2) and their factor loadings.

(b) Supportive leadership style (SL): The communality of the orderly seventh statement is 0.422 at the first factor analysis, as the questions 5, 6, 7 and 8 are thus eliminated. Then the second factor analysis is performed as shown in Table 1b. As can be seen in Table 1b, there was only one factor whose Eigenvalue (3.563) is over one and the cumulated explained variance percentage was 51.07%. This identified dimension is stated as 'supportive leadership' and the factor loadings are shown in the Table 1b.

(c) Participative leadership style (PL): After the factor analysis is performed, there is only one factor with an Eigenvalue value greater than one. The second factor has an Eigenvalue of only 0.475, and is thus eliminated. As can be seen in Table 1b, the Eigenvalue of the retained factor is 2.766 and the cumulated explained variance percentage is 68.908%. This identified dimension is stated as 'participative leadership' and the factor loadings were shown in Table 1b.

Regression analyses among Americans

This study applies the regression analysis of OC and LS after the factor analysis. Then, the three dimensions of LS are treated as independent variables, and the OC variables as dependent variables, for regression analysis. The result of the regression analysis for variables in US is shown in Tables 2 and 3 and the analyses are as follows: Table 2 lists the Pearson correlation coefficients of the variables in the OC dimensions and the descriptive statistics for the variables used in regressions for the three dimensions of OC in the US.

Table 3 presents the regression analysis for the three dimensions of OC in the US. According to the results in Table 3, the three dimensions of OC: sense of belonging, promising future, and loyalty all had significant relationships with the supportive leadership style variables.

The supportive leadership style leads to a positive OCF2 and OCF3), and their factor loadings shown in influence toward the sense of belonging, promising future, and loyalty. Also, the auditing personnel have a

Table 1a. The factor analysis for organizational commitment (OC) in the CPA firms: US.

Variable item	Factor loading	MSA	Communality (total =250.8883)	Explained variance percentage (%)	Cumulated explained variance percentage (%)	Eigenvalue	Dimension statement
10. I am extremely glad that I chose this firm to work for over others I was considering at the time I joined.	0.874	0.859	0.793				
15R. Decision to work for this firm was a definite mistake on my part.	0.789	0.897	0.698				
14. For me, this is the best of all possible firms for which to work.	0.764	0.923	0.741	47.054	47.054	0.450	0 (1)
06. I am proud to tell others that I am part of this firm.	0.720	0.900	0.651	47.351	47.351	6.156	Sense of belonging
13. I really care about the fate of this firm.	0.674	0.838	0.542				
08. This firm really inspires my best job performance.	0.664	0.899	0.637				
02. I talk up this organization to my friends as a great firm to work for.	0.626	0.914	0.673				
11R. There is not too much to be gained by sticking with this firm							
indefinitely.	0.791	0.901	0.637				
12R. Often, I find it difficult to agree with this firm's policies on important matters relating to its employees.	0.732	0.883	0.601	0.040	50.000	4.044	Promising future
09R. It would take very little change in my present circumstances to cause me to leave this firm.	0.646	0.923	0.585	9.342	56.693	1.214	
05. I find that my values and the firm's value are very similar.	0.577	0.928	0.646				
04. I would accept almost any type of job assignment in order to keep working for this firm.	0.779	0.887	0.750	8.564	65.257	1.113	Loyalty
03R. I feel very little loyalty to this firm.	0.548	0.941	0.535				

Table 1b. The factor analysis for perceived leadership styles instrumental leadership style (IL).

Variable item	Factor loading	MSA	Communality (total =25.8883)	Explained variance percentage (%)	Cumulated explained variance percentage (%)	Eigenvalue	Dimension statement
05. My superior maintains definite standards of performance.	0.806	0.656	0.652				
06. My superior asks that the group members follow standard rules and regulations.	0.738	0.666	0.545	35.6	35.6	2.4902	Standards-
03. My superior makes sure that his part in the group is understood.	0.708	0.730	0.502				oriented
01. My superior lets group members know what is expected of them.	0.696	0.759	0.560				
02. My superior decides what shall be done and how it shall be done.	0.800	0.606	0.642	23.2	58.8	1.6241	Instructional
04. My superior decides what shall be done and how it shall be done.	0.785	0.634	0.618				
My superior decides what shall be done and how it shall be done.							
07. My superior explains the way any task should be carried out	0.676	0.689	0.591				

Table 1b. Contd.

Supportive leadership style (SL)							
10. My superior helps me make working on my tasks more pleasant.	0.632	0.889	0.662				
09. My superior helps me overcome problems which stop me from carrying out my task.	0.582	0.894	0.617	F1 070	F1 070	2 502	Currentiue
02R. My superior does little things to make it pleasant to be a member of the group.	0.542	0.888	0.853	51.070	51.070	3.303	Supportive
03. My superior puts suggestions made by the group into operation.	0.501	0.885	0.620				
04. My superior treats all group members as his equals. $_{\circ}$	0.833	0.854	0.924	11 413	62 483	0 767	deleted
01. My superior is friendly and polite.	0.519	0.855	0.512		02.100	0.101	uolotou
Participative leadership style (PL)							
01. When faced with a problem, my superior consults with subordinates.	0.869	0.854	0.765				
02. Before making decisions, my superior gives serious consideration to what the subordinates have to say.	0.788	0.829	0.820				
05. My superior asks subordinates for suggestions on what assignments should be made.	0.694	0.904	0.875	68.908	68.908	2.766	Participative
03. My superior asks subordinates for their suggestions considering how to carry out assignments.	0.583	0.814	0.792				
04. Before taking action my superior consults with subordinates.	0.526	0.842	0.763	11.836	80.744	0.475	deleted

personnel have positive relationship in sense of belonging of OC. However, people with higher education specialized in the auditing field or holding American certified public accountant (CPA) licenses show negative promising future of OC.

Although American CPAs seem to have a positive loyalty in OC, there is a negative relationship for male senior staff with other certificates for loyalty in OC.

Factor analysis among Taiwanese

Organizational Commitment (OC): After the first factor analysis, the fourth and tenth statements are deleted. The result is shown in Table 4b.

There are three Eigenvalues greater than 1 (5.022, 2.2023, and 1.0335) and the cumulated explained variance percentage is 55.1%. The OC was classified as dedication, policy recognition, and loyalty; the factor loadings are shown in Table 4a.

Perceived leadership styles: Three dimensions are classified thus:

i. Instrumental leadership style (IL): After factor analysis, there is only one factor with Eigenvalue greater than one. As shown in Table 4b, the cumulated explained variance percentage is 47.5%. This dimension is stated as 'instrumental leadership' and the factor loadings were shown in the table. ii. Supportive leadership style (SL): After the first factor analyses, the third statement is eliminated. There is only one factor with Eigenvalue greater than one so the second factor was deleted. The cumulated explained variance percentage is 59.80%. This dimension is stated as supportive leadership style and the factor loadings are shown in Table 4b.

iii. Participative leadership style (PL): After the factor analysis, there is only one factor with Eigenvalue greater than one and the second Eigenvalue is only 0.429. Therefore, the second factor is deleted. As shown in Table 4b, the cumulated explained variance percentage is 72.882%. This dimension is stated as participative leadership style and the factor loadings are shown in Table 4b.

PL FIRM1 FIRM2 GENDER AGE EDU BEDU JOBLA JOBFA YEAR CPAUS CPAOTH OTHLICEN OCF1 OCF2 OCF3 IL1 IL2 SL 0.0227 0.1044 -0.0588 -0.0214 FIRM1 1 -0.2095 -0.0185 -0.1098 -0.0376 0.0293 -0.0886 0.0335 -0.0616 -0.0758 -0.0428 -0.0375 0.1073 0.009 -0.0631 0.014 0.83 0.2133 0.6623 0.7334 0.792 0.303 0.699 0.224 0.473 0.378 0.619 0.663 0.211 0.909 0.494 0.803 0.463 FIRM2 -0.20955 1 0.10902 -0.09203 0.08403 -0.05579 0.0947 0.08829 -0.00145 0.01869 0.12203 -0.06186 -0.2674 -0.01627 0.05108 -0.06076 0.02052 -0.041 -0.05666 0.014 0.2048 0.2977 0.329 0.3049 0.8284 0.5173 0.271 0.9867 0.1554 0.4727 0.0016 0.8504 0.5533 0.4806 0.8119 0.6343 0.5108 GENDER -0.01851 0.10902 1 -0.01839 0.07161 0.09369 0.06443 0.14963 0.08389 0.17027 -0.12624 -0.05537 -0.0864 -0.01157 -0.13181 -0.19405 -0.0204 -0.17346 -0.14407 0.83 0.2048 0.8355 0.4057 0.2762 0.4544 0.081 0.3334 0.0467 0.1416 0.5204 0.3154 0.8932 0.1247 0.0231 0.8129 0.0426 0.093 AGE -0.09203 -0.01839 0.22143 0.38156 -0.3998 0.44718 0.19033 -0.08721 0.16006 -0.10988 1 -0.02517 0.17498 0.11058 -0.24248 0.15606 -0.38993 0.01354 0.05863 0.8355 0.2133 0.2977 0.7763 0.0113 <.0001 <.0001 <.0001 0.0301 0.3238 0.0689 0.0465 0.2104 0.0054 0.0762 <.0001 0.8785 0.5076 EDU -0.03764 0.08403 0.07161 -0.02517 1 -0.3929 0.01162 -0.12224 -0.05868 0.21245 -0.23421 0.03502 -0.0339 -0.15625 0.09543 0.03725 -0.02232 -0.00078 0.01659 0.6623 0.329 0.4057 0.7763 <.0001 0.8928 0.1547 0.499 0.0127 0.0059 0.6845 0.6941 0.0682 0.2673 0.6656 0.9928 0.7957 0.8474 BEDU 0.02937 -0.05579 0.09369 0.22143 -0.3929 1 0.10847 -0.07364 0.13259 0.05135 -0.09227 0.09377 0.01055 0.08518 -0.14699 -0.07786 -0.02326 0.0457 -0.00677 0.0113 <.0001 0.2835 0.7334 0.5173 0.2762 0.2071 0.3924 0.1253 0.5512 0.2758 0.9027 0.3223 0.0865 0.3658 0.9374 0.7873 0.5959 0.0802 JOBLA 0.02272 0.0947 0.06443 0.38156 0.01162 0.10847 1 -0.16044 0.67331 0.33619 0.06797 0.11016 -0.07009 -0.12928 0.10336 -0.51235 -0.05632 0.13306 <.0001 <.0001 0.7922 0.271 0.4544 <.0001 0.8928 0.2071 0.0611 0.3515 0.43 0.2 0.4157 0.1322 0.2294 <.0001 0.5133 0.1211 JOBFA -0.0886 0.08829 0.14963 -0.3998 -0.12224 -0.07364 -0.16044 1 0.03743 0.05313 0.05751 -0.18757 0.0806 -0.19354 0.15272 0.10017 0.15335 0.02616 -0.04113 0.3032 0.3049 0.081 <.0001 0.1547 0.3924 0.0611 0.6665 0.5375 0.5045 0.0282 0.3491 0.0235 0.0748 0.2442 0.0736 0.7616 0.6332 YEAR 0.03354 -0.00145 0.08389 0.44718 -0.05868 0.13259 0.67331 0.03743 1 0.41776 -0.04331 -0.06093 0.17905 -0.14378 -0.08233 0.12744 -0.54479 -0.06458 0.14656 0.6994 0.9867 0.3334 <.0001 0.499 0.1253 <.0001 0.6665 <.0001 0.618 0.4827 0.0377 0.0962 0.3424 0.1407 <.0001 0.4568 0.0899 -0.2001 CPAUS 0.10445 0.01869 0.17027 0.19033 0.21245 0.05135 0.33619 0.05313 0.41776 0.09101 0.05661 -0.21572 0.11512 0.04411 -0.30863 0.06459 0.0631 1 0.2245 0.8284 0.0467 0.0301 0.0127 0.5512 <.0001 0.5375 <.0001 0.0191 0.2902 0.5111 0.0114 0.1804 0.6088 0.0002 0.4638 0.4533 CPAOTH -0.06169 0.12203 -0.12624 -0.08721 -0.23421 -0.09227 0.0802 0.05751 -0.04331 -0.2001 1 -0.01821 -0.0577 0.02634 -0.0568 -0.01778 0.05822 -0.02049 0.00703 0.3238 0.2835 0.3515 0.5045 0.0191 0.8327 0.4739 0.1554 0.1416 0.0059 0.618 0.5031 0.76 0.5097 0.8366 0.4991 0.8122 0.935 OTHLICE -0.07584 -0.06186 -0.05537 0.16006 0.03502 0.09377 0.06797 -0.18757 -0.06093 0.09101 -0.01821 0.16029 -0.04838 -0.17094 0.10689 -0.06489 0.2175 0.18413 1 Ν 0.2758 0.43 0.2902 0.8327 0.3784 0.4727 0.5204 0.0689 0.6845 0.0282 0.4827 0.0613 0.5745 0.0458 0.2138 0.4513 0.0107 0.0313

Table 2a. Pearson correlation coefficients of variables for organizational commitment dimensions: in US.

Table 2a. Contd.

OCF1	-0.04281	-0.2674	-0.0864	0.17498	-0.0339	0.01055	0.11016	0.0806	0.17905	0.05661	-0.0577	0.16029	1	0	0	0.26777	-0.11158	0.39881	0.3166
	0.6194	0.0016	0.3154	0.0465	0.6941	0.9027	0.2	0.3491	0.0377	0.5111	0.5031	0.0613		1	1	0.0016	0.1942	<.0001	0.0002
OCF2	-0.03755	-0.01627	-0.01157	0.11058	-0.15625	0.08518	-0.07009	-0.19354	-0.14378	-0.21572	0.02634	-0.04838	0	1	0	0.15704	0.12712	0.21829	0.00746
	0.6631	0.8504	0.8932	0.2104	0.0682	0.3223	0.4157	0.0235	0.0962	0.0114	0.76	0.5745	1		1	0.0669	0.1388	0.0104	0.9311
OCF2	0.10732	0.05108	-0.13181	-0.24248	0.09543	-0.14699	-0.12928	0.15272	-0.08233	0.11512	-0.0568	-0.17094	0	0	1	0.0967	0.07427	0.21502	0.13859
	0.2119	0.5533	0.1247	0.0054	0.2673	0.0865	0.1322	0.0748	0.3424	0.1804	0.5097	0.0458	1	1		0.261	0.3884	0.0116	0.1063
IL1	0.0098	-0.06076	-0.19405	0.15606	0.03725	-0.07786	0.10336	0.10017	0.12744	0.04411	-0.01778	0.10689	0.26777	0.15704	0.0967	1	0	0.58673	0.46821
	0.9095	0.4806	0.0231	0.0762	0.6656	0.3658	0.2294	0.2442	0.1407	0.6088	0.8366	0.2138	0.0016	0.0669	0.261		1	<.0001	<.0001
IL2	-0.05889	0.02052	-0.0204	-0.38993	-0.02232	-0.02326	-0.51235	0.15335	-0.54479	-0.30863	0.05822	-0.06489	-0.11158	0.12712	0.07427	0	1	0.11897	0.0545
	0.4943	0.8119	0.8129	<.0001	0.7957	0.7873	<.0001	0.0736	<.0001	0.0002	0.4991	0.4513	0.1942	0.1388	0.3884	1		0.1661	0.527
SL	-0.0214	-0.041	-0.17346	0.01354	-0.00078	0.0457	-0.05632	0.02616	-0.06458	0.06459	-0.02049	0.2175	0.39881	0.21829	0.21502	0.58673	0.11897	1	0.64138
	0.8039	0.6343	0.0426	0.8785	0.9928	0.5959	0.5133	0.7616	0.4568	0.4533	0.8122	0.0107	<.0001	0.0104	0.0116	<.0001	0.1661		<.0001
PL	-0.06314	-0.05666	-0.14407	0.05863	0.01659	-0.00677	0.13306	-0.04113	0.14656	0.0631	0.00703	0.18413	0.3166	0.00746	0.13859	0.46821	0.0545	0.64138	1
	0.4636	0.5108	0.093	0.5076	0.8474	0.9374	0.1211	0.6332	0.0899	0.4638	0.935	0.0313	0.0002	0.9311	0.1063	<.0001	0.527	<.0001	

The figures below the Pearson correlation coefficients are p-value.

Regression analysis among Taiwanese

Table 5 lists the Pearson correlation coefficients of the variables in the OC dimensions and the descriptive statistics for the variables used in regressions for the three dimensions of OC in Taiwan. Table 6 presents the regression results in Taiwan. The positive influence factors for dedication include supportive leadership style, participative leadership style, and longer working tenures. For policy recognition of the OC dimension, the three LSs do not reveal any significance. Males show positive influence in the policy recognition of the OC dimension. The higher education of a respondent leads to a negative influence in policy recognition. Furthermore, in the loyalty dimension of OC, the supportive leadership style and longer working tenure have positive influences. However, higher working level indicated negative influence in the loyalty OC.

Conclusion

This study successfully identifies the differences between American and Taiwanese CPA firms with regard to significant causal relationship between LS and OC. Among the American respondents, there are three OC dimensions identified: sense of belonging, promising future, and loyalty. Through regression analysis, supportive leadership has a positive influence on OC in these three dimensions. Moreover, auditing service is also an antecedent with positive impact on sense of belonging OC. However, the higher education, auditing field, American CPA license and other licenses holders possess a negative association with loyalty OC.

Along with the Taiwanese respondents, there are three identified OC dimensions, namely, dedication, policy recognition, and loyalty. Through regression analysis, the supportive and participative

Variable	Mean	Standard deviation	Minimum	Maximum
FIRM1	0.2043	0.404	0	1
FIRM2	0.1459	0.354	0	1
GENDER	0.5182	0.501	0	1
AGE	28.4769	5.002	22	49
EDU	3.5401	0.542	2	4
BEDU	0.3649	0.483	0	1
JOBLA	1.9635	0.817	1	3
JOBFA	0.8175	0.387	0	1
YEAR	3.2190	2.754	0.08	13
CPAUS	0.7299	0.445	0	1
CPAOTH	0.0146	0.120	0	1
OTHLICEN	0.0219	0.146	0	1
OCF1	1.46E-07	1	-4.8322	1.7011
OCF2	-3.65E-07	1	-2.6020	2.4054
OCF3	-2.19E-07	1	-2.8731	2.6323
IL1	2.92E-07	1	-2.3723	2.1867
IL2	1.46E-07	1	-2.7184	2.4192
SL	-7.30E-08	1	-2.8246	2.3288
PL	2.19E-07	1	-2.9046	2.4507

Table 2b. Descriptive statistics for variables used in regressions for the three dimensions of organizational commitment (n=137) – US.

FIRM1: If the firm is coded as 1, then FIRM1 is 1, otherwise is 0; FIRM2: If the firm is coded as 2, then FIRM2 is 1, otherwise is 0; GENDER: If the respondent is a male, then the GENDER is 1, and 0 is for female; AGE: Indicate the age for the respondent; EDU: Education level includes high school graduate is coded as 1, associate graduate is coded as 2, undergraduate is coded as 3, master graduate is coded as 4, and doctoral is coded as 5; BEDU: After graduated, if the respondent still continues to pursuit education, then it is coded as 1. Otherwise is 0; JOBLA: For job level, the manager or assistant manager is coded as 3. The senior or in-charge is coded as 2. The level 1 auditor staff is coded as 1; JOBFA: For job field, auditing (financial and taxation assurance) field is coded as 1, taxation service (taxation, bookkeeping, business consulting and others) is coded as 0; YEAR: The working tenure is indicated as year (ex. Has worked for one year and six months, then 1.5 years would be listed); CPAUS: The respondent who held native CPA license is coded as 1, otherwise is 0; CPAOTH: The respondent who held foreign (ex. Canada or United Kingdom) is coded as 1, otherwise is 0; OTHLICEN: The respondent who held others licenses (ex. Certified Management Accountant, Chartered Financial Analyst, or lawyer) is coded as 1, otherwise is 0; OCF1: the value for sense of belonging dimension of the organizational commitment; OCF2: the value for promising future dimension of the organizational commitment; OCF3: the value for loyalty dimension of the organizational commitment; IL: the value for instrumental leadership, refer to Table 1: SL: the value for supportive leadership, refer to Table 1; PL: the value for participative leadership, refer to Table 1.

Table 3. Regression analysis for the three dimensions of organizational commitment in US.

Dimension of organizational commitment	Sense of belonging	(OCF1)	Promising future	(OCF2)	Loyalty	(OCF3)
Variable	Parameter estimate	p-value	Parameter estimate	p-value	Parameter estimate	p-value
Intercept	-1.1862	0.259	1.2832	0.232	1.1576	0.294
FIRM1	-0.0821	0.698	-0.1589	0.463	0.1633	0.464
FIRM2	-0.7323**	0.002	0.0770	0.753	0.1663	0.510
GENDER	-0.0232	0.892	0.1573	0.369	-0.3619**	0.046
AGE	0.0285	0.195	0.0172	0.442	-0.0419*	0.072
EDU	-0.0069	0.968	-0.3394*	0.060	0.0327	0.859
BEDU	-0.1108	0.574	0.0130	0.948	-0.1912	0.357
JOBLA	0.0621	0.665	0.0979	0.504	-0.0838	0.578
JOBFA	0.4995*	0.050	-0.6181**	0.018	0.1445	0.587
YEAR	0.0414	0.397	-0.0347	0.486	0.0040	0.936
CPAUS	-0.1990	0.359	-0.3955*	0.076	0.3800*	0.097
CPAOTH	-0.3370	0.636	-0.2573	0.723	-0.5383	0.472

Table 3. Contd.

OTHLICEN	0.5267	0.356	-0.9218	0.115	-1.3212**	0.029	
IL1	-0.0599	0.574	0.1204	0.270	-0.0586	0.601	
IL2	-0.0720	0.484	0.0377	0.718	-0.0699	0.518	
SL	0.3991**	0.001	0.3745**	0.003	0.2380*	0.068	
PL	0.0348	0.752	-0.2815	0.013	0.0608	0.600	
VIF	1.14~2.75	.14~2.75 1.14~2.75		1.14~2.75			
F value	3.08		2.34		2.16		
p-value	0.0003**	0.0050**			0.0101**		
R ²	0.3057		0.2507				
Adj R ²	0.2065	0.1436 0.1267					

Variables are defined in Table 1; VIF is the variance inflation factor. It is used to test whether there is multicolinearity situation. Except the intercept is zero, the interval is listed in the table (Chatterjee and Price, 1991); Significant at the 5% (*) and 1% (**) levels, two-sides test.

Table 4a. Factor analysis for organizational commitment in the CPA firms—Taiwan.

Variable item	Factor loading	MSA	Communality (total= 25.88)	Explained variance percentage (%)	Cumulated explained variance percentage (%)	Eigenvalue	Dimension statement
13. I really care about the fate of this firm.	0.820	0.856	0.678				
05. I find that my values and the firm's value are very similar.	0.819	0.905	0.700				
02. I talk up this organization to my friends as a great firm to work for.	0.815	0.901	0.769				
01. I am willing to put in a great deal of effort beyond what is normally expected in order to help this firm be successful.	0.780	0.924	0.627	33.5	33.5	5.022	Dedication
06. I am proud to tell others that I am part of this firm.	0.743	0.891	0.639				
14. For me, this is the best of all possible firms for which to work.	0.654	0.892	0.507				
08. This firm really inspires my best job performance.	0.647	0.887	0.612				
12R. Often, I find it difficult to agree with this firm's policies on important matters relating to its employees.	0.842	0.809	0.719				
11R. There is not too much to be gained by sticking with this firm indefinitely.	0.606	0.826	0.769	14.7	48.2	2.203	Policy
07R. I could just as well be working for a different firm as long as the type of work was similar.	0.549	0.730	0.503				recognition
03R. I feel very little loyalty to this firm.	0.690	0.738	0.522				
15R. Decision to work for this firm was a definite mistake on my part.	0.661	0.833	0.509	6.0	FE 1	1 022	Lovalty
09R. It would take very little change in my present circumstances to cause me to leave this firm.	0.578	0.736	0.500	0.9	əə. I	1.033	Loyaity

Table 4b. The factor analysis for perceived leadership styles in the CPA firms-Taiwan.

Variable item	Factor loading	MSA	Communality (total= 25.88)	Explained variance percentage (%)	Cumulated explained variance percentage (%)	Eigenvalue	Dimension statement
Instrumental leadership (IL)							
01. My superior lets group members know what is expected of them.	0.734	0.746	0.794	47.5	47.5	2.599	Instrumental
05. My superior maintains definite standards of performance.	0.649	0.846	0.666				
02. My superior decides what shall be done and how it shall be done.	0.590	0.813	0.721				
03. My superior makes sure that his part in the group is understood.	0.801	0.884	0.776	14.517	62.069	0.693	deleted
Supportive leadership (SL)							
02R. My superior does little things to make it pleasant to be a member of the group.	0.880	0.886	0.855				
01. My superior is friendly and polite.	0.847	0.878	0.834				
10. My superior helps me make working on my tasks more pleasant.	0.797	0.890	0.786				
09. My superior helps me overcome problems which stop me from carrying out my task.	0.731	0.898	0.682	59.802	59.802	5.099	Supportive
04. My superior treats all group members as his equals.	0.842	0.890	0.815				
07. My superior looks out for the personal welfare of group members.	0.717	0.933	0.798				
08. My superior is willing to make changes.	0.632	0.920	0.705				
05. My superior gives advance notice of changes.	0.620	0.931	0.827				
06. My superior keeps to himself.	0.766	0.880	0.983	9.879	69.498	0.645	deleted
Participative leadership (PL)							
04. Before taking action my superior consults with subordinates.	0.845	0.823	0.781				
03. My superior asks subordinates for their suggestions considering how to carry out assignments.	0.824	0.845	0.797	72.882	72.882	3.136	Participative
02. Before making decisions, my superior gives serious consideration to what the subordinates have to say.	0.846	0.738	0.923	9.967	82.849	0.429	deleted

participative leadership styles and longer working tenure have a positive influence on dedication OC. Moreover, males show a positive connection but higher education provides a negative correlation with policy recognition OC. Further, longer working tenure and supportive leadership style both have a positive relation but higher working level showed a negative affiliation with loyalty OC.

To summarize, besides the common OC factor of loyalty, Americans are found to value the sense of belonging and promising future, while Taiwanese are seen to focus on dedication and policy recognition. Through the regression analysis for the influential LS, the supportive leadership style is favored in America while the supportive and participative leadership styles are more important for the Taiwanese. With regard to

FIRM1 FIRM2 FIRM3 GENDER AGE EDU BEDU JOBLA JOBFA YEAR CPATW CPAOTH OTHLICEN OCF1 OCF2 OCF3 IL SL PL -0.0275 FIRM1 1 -0.1865 -0.3325 0.0820 -0.0529 0.1699 -0.0640 -0.0187 0.1337 -0.0776 0.2469 -0.0401 0.0853 0.0239 0.0074 0.0191 -0.0561 -0.0054 <.001 0.666 0.380 0.003 0.198 0.407 0.007 0.315 0.769 0.035 0.224 <.001 0.530 0.181 0.707 0.907 0.765 0.932 FIRM2 -0.0113 0.1060 0.0231 -0.1318 0.1359 -0.2894 0.0607 -0.0603 0.0343 -0.0530 -0.0595 -0.1613 -0.0759 -0.0681 -0.1865 1 -0.2943 0.0136 0.0153 0.003 <.001 0.858 0.096 0.717 0.038 0.032 <.001 0.341 0.345 0.591 0.406 0.831 0.809 0.351 0.011 0.234 0.286 FIRM3 -0.3325 -0.2943 0.0127 -0.0799 -0.0968 0.0470 -0.0103 0.0548 -0.0460 -0.0783 -0.0190 0.0151 -0.0364 0.0122 0.0057 0.0735 -0.0034 1 0.1005 <.001 <.001 0.842 0.210 0.129 0.4547 0.871 0.390 0.471 0.219 0.765 0.812 0.568 0.848 0.928 0.099 0.249 0.956 GENDER 0.0820 -0.0113 0.0127 1 0.2345 0.1510 -0.0110 0.076 0.1759 0.0309 0.3158 -0.0241 0.0701 -0.0076 0.0763 0.0022 0.0288 0.0165 0.1692 0.842 0.231 0.198 0.858 <.001 0.017 0.858 0.229 0.005 0.627 <.001 0.705 0.272 0.904 0.007 0.972 0.651 0.796 AGE -0.0529 0.1060 -0.0799 0.2345 1 0.1719 0.0258 0.6478 -0.1852 0.7107 0.2977 0.2866 -0.0225 0.1061 0.0963 0.0611 -0.0979 -0.0600 0.0364 0.407 0.096 0.210 <.001 0.006 0.685 <.001 0.003 <.001 <.001 0.096 0.130 0.338 0.124 0.347 0.568 <.001 0.724 0.3879 0.2230 -0.0978 EDU 0.1699 0.0231 -0.0968 0.1510 0.1719 1 -0.0021 0.0919 -0.0203 -0.0621 0.1199 -0.0873 -0.0307 0.0050 -0.0362 0.0519 0.007 0.717 0.149 0.330 <.0001 0.129 0.017 0.006 0.9731 0.749 <.001 0.059 0.171 0.125 0.630 0.937 0.570 0.416 BEDU -0.0640 -0.1318 0.0477 -0.0113 0.0258 -0.0021 1 0.0218 -0.1390 -0.0965 0.0015 0.1521 0.0307 0.0312 0.0346 -0.1011 0.0779 0.0086 0.0315 0.315 0.038 0.454 0.858 0.685 0.973 0.732 0.028 0.130 0.981 0.016 0.631 0.624 0.588 0.112 0.222 0.892 0.621 JOBLA -0.0187 0.1359 -0.0103 0.0768 0.6478 0.0919 0.0218 1 -0.0622 0.6667 0.2440 0.1083 -0.1063 0.1301 0.0073 -0.0335 0.0244 0.0611 0.1012 0.769 0.032 0.871 0.229 <.001 0.149 0.732 0.330 <.001 <.001 0.089 0.095 0.041 0.908 0.600 0.702 0.338 0.112 **JOBFA** 0.1337 -0.2894 0.0548 0.1759 -0.1852 -0.0203 -0.1390 -0.0622 1 -0.0669 0.1298 -0.2223 0.0724 -0.0397 -0.0165 0.0953 0.1819 0.0751 0.0639 0.035 <.001 0.749 0.028 0.330 0.041 0.239 0.390 0.005 0.003 0.294 <.001 0.256 0.534 0.795 0.135 0.004 0.316 YEAR -0.0776 0.0607 -0.0460 0.0309 0.7107 -0.0621 -0.0965 0.6667 -0.0669 1 0.1184 0.1130 -0.0828 0.1981 0.0363 0.1422 0.0189 0.0443 0.0957 <.001 0.294 0.025 0.488 0.224 0.341 0.471 0.627 <.001 0.330 0.130 0.063 0.076 0.194 0.001 0.569 0.766 0.133 CPATW -0.0603 -0.0783 0.3158 0.2977 0.3879 0.0015 0.1298 0.1184 0.1257 0.0330 -0.0224 0.0348 0.2469 0.2440 1 0.0497 -0.0110 0.0141 0.0175 <.001 0.345 0.219 <.001 <.001 <.001 0.981 <.001 0.041 0.063 0.048 0.436 0.862 0.605 0.824 0.784 0.726 0.585 CPAOTH -0.0401 -0.0190 -0.0241 0.2866 0.2230 0.1521 0.1083 -0.2223 0.1130 0.1257 0.0405 0.0221 0.0017 0.0160 0.1409 0.0343 1 -0.0480 0.0190 0.530 0.591 0.765 0.7058 <.001 <.001 0.016 0.0893 <.001 0.076 0.048 0.452 0.765 0.526 0.728 0.977 0.801 0.026 OTHLICEN 0.1199 0.0853 -0.0530 0.0151 0.0701 -0.0225 0.0307 -0.1063 0.0724 -0.0828 0.0497 -0.0480 1 -0.0884 0.0062 -0.0146 -0.0611 -0.0416 -0.0939 0.181 0.406 0.812 0.0954 0.256 0.194 0.436 0.452 0.922 0.818 0.272 0.724 0.059 0.631 0.165 0.338 0.514 0.141

Table 5a. Pearson correlation coefficients of variables for organizational commitment dimensions: in Taiwan.

Table 5a. Contd.

OCF1	0.0239	0.0136	-0.0364	-0.0076	0.1061	-0.0873	0.0312	0.1301	-0.0397	0.1981	-0.0110	0.0190	-0.0884	1	0	0	0.3827	0.4817	0.4877
	0.707	0.831	0.568	0.904	0.096	0.171	0.624	0.041	0.534	0.001	0.862	0.765	0.165		1	1	<.001	<.001	<.001
OCF2	0.0074	0.0154	0.0122	0.1692	0.0963	-0.0978	0.0346	0.0073	-0.0165	0.0363	0.0330	0.0405	0.0062	0	1	0	-0.1793	-0.2286	-0.2029
	0.907	0.809	0.848	0.007	0.130	0.125	0.588	0.9086	0.795	0.569	0.605	0.526	0.922	1		1	0.004	<.001	0.001
0050	0.0404	0.0505	0.0057	0.0700	0.0014	0.0007	0.4044	0 0005	0.0050	0.4400	0.0444	0.0004	0.0440	0	0		0 4 4 5 7	0.4000	0 4055
OCF3	0.0191	-0.0595	0.0057	0.0763	0.0611	-0.0307	-0.1011	-0.0335	0.0953	0.1422	0.0141	0.0221	-0.0146	0	0	1	0.1457	0.1633	0.1055
	0.765	0.351	0.928	0.231	0.338	0.630	0.112	0.600	0.135	0.025	0.824	0.728	0.818	1	1		0.022	0.010	0.097
п	-0 0275	-0 1613	0 1050	0 0022	_0 0070	0.0050	0 0779	0 0244	0 1810	0 0180	0 0175	0.0017	-0.0611	0 3827	-0 1703	0 1/157	1	0.6345	0 6266
IL.	-0.0275	-0.1015	0.1000	0.0022	-0.0373	0.0000	0.0775	0.0244	0.1013	0.0103	0.0175	0.0017	-0.0011	0.0027	-0.1735	0.1407	1	0.0040	0.0200
	0.666	0.011	0.099	0.972	0.124	0.937	0.222	0.702	0.004	0.766	0.784	0.977	0.338	<.001	0.004	0.022		<.001	<.001
SI	-0.0561	-0.0759	0.0735	0.0288	-0.0600	-0.0362	0.0086	0.0611	0.0751	0.0443	-0.0224	0.0160	-0.0416	0 4817	-0.2286	0.1633	0.6345	1	0.8030
01	0.380	0.234	0.240	0.651	0.347	0.570	0.802	0 338	0 230	0 / 88	0.726	0.801	0.51/	< 001	< 001	0.010	< 001	•	< 001
	0.000	0.234	0.249	0.001	0.547	0.570	0.092	0.550	0.239	0.400	0.720	0.001	0.514	<.001	<.001	0.010	<.001		<.001
PL	-0.0054	-0.0681	-0.0034	0.0165	0.0364	0.0519	0.0315	0.1012	0.0639	0.0957	0.0348	0.1409	-0.0939	0.4877	-0.2029	0.1055	0.6266	0.8030	1
	0.932	0 286	0 956	0 796	0 568	0 416	0 621	0 112	0.316	0 133	0 585	0 026	0 141	< 001	0.001	0 097	< 001	< 001	
	0.001	0.200	0.000	000	0.000	0.110	0.021	\$. I I E	0.010	0.100	0.000	0.020	÷	.001	0.001	0.001			

The figures below the Pearson correlation coefficients are p-value.

Table 5b. Descriptive statistics for variables used in regressions for the three dimensions of organizational commitment (n = 247) – Taiwan.

Variable	Mean	Standard deviation	Minimum	Maximum
FIRM1	0.1740	0.379	0	1
FIRM2	0.1417	0.349	0	1
FIRM3	0.3441	0.476	0	1
GENDER	0.3562	0.479	0	1
AGE	28.1417	4.063	22	46
EDU	3.2024	0.459	2	5
BEDU	0.1417	0.349	0	1
JOBLA	1.8704	0.816	1	3
JOBFA	0.8178	0.386	0	1
YEAR	2.9637	2.829	0.08	18
CPATW	0.1700	0.376	0	1
CPAOTH	0.0404	0.197	0	1
OTHLICEN	0.0647	0.277	0	2
OCF1	3.60E-18	1.122	-3.581	3.21394

Table 5b. Contd.

OCF2	-4.05E-08	1.122	-2.31903	4.11165
OCF3	2.43E-07	1.122	-4.26459	3.84963
IL	8.09E-18	1.122	-3.408	2.25709
SL	-1.62E-07	1.122	-3.2422	2.35456
PL	-6.88E-07	1.122	-2.94848	2.46587

FIRM1: If the firm is coded as 1, then FIRM1 is 1, otherwise is 0; FIRM2: If the firm is coded as 2, then FIRM2 is 1, otherwise is 0; FIRM3: If the firm is coded as 3, then FIRM3 is 1, otherwise is 0; GENDER: If the respondent is a male, then the GENDER is 1, and 0 is for female; AGE: Indicate the age for the respondent; EDU: Education level includes high school graduate is coded as 1, associate graduate is coded as 2, undergraduate is coded as 3, master graduate is coded as 4, and doctoral is coded as 5; BEDU: After graduated, if the respondent still continues to pursuit education, then it is coded as 1. Otherwise is 0; JOBLA: For job level, the manager or assistant manager is coded as 3. The senior or in-charge is coded as 2. The level 1 auditor staff is coded as 1; JOBFA: For job field, auditing (financial and taxation assurance) field is coded as 1, taxation service (taxation, bookkeeping, business consulting and others) is coded as 0; YEAR: The working tenure is indicated as year (ex. Has worked for one year and six months, then 1.5 years would be listed); CPATW: The respondent who held native CPA license is coded as 1, otherwise is 0; CPAOTH: The respondent who held foreign (ex. American) or Mainland CPA license is coded as 1, otherwise is 0; OTHLICEN: The respondent who held others licenses (ex. Internal Control certificate, Stock Securities Agent, Stock Security Analyst or Option Dialers) is coded as 1, otherwise is 0; OCF1: the value for loyalty dimension of the organizational commitment; OCF2: the value for policy recognition dimension of the organizational commitment; IL: the value for instrumental leadership, refer to Table 4; SL: the value for supportive leadership, refer to Table 4; PL: the value for participative leadership, refer to Table 4.

Table 6. The regression analysis for the three dimensions of organizational commitment in Taiwan.

Dimension of organizational commitment	Dedication	(OCF1)	Policy recognition	(OCF2)	Loyalty	(OCF3)
Variable	Parameter estimate	p-value	Parameter estimate	p-value	Parameter estimate	p-value
Intercept	0.3376	0.668	0.6561	0.465	0.1144	0.899
FIRM1	0.2732	0.150	0.0760	0.725	0.1130	0.603
FIRM2	0.1810	0.386	0.0378	0.873	-0.0321	0.892
FIRM3	-0.0309	0.837	0.0691	0.687	0.0052	0.975
GENDER	-0.0285	0.842	0.4292**	0.009	0.1404	0.394
AGE	0.0183	0.497	0.0170	0.580	0.0144	0.642
EDU	-0.2175	0.158	-0.3858*	0.028	-0.0157	0.928
BEDU	0.1269	0.498	0.1065	0.617	-0.2318	0.280
JOBLA	-0.0754	0.502	-0.0472	0.712	-0.3410**	0.008
JOBFA	-0.2074	0.257	-0.0081	0.968	0.1961	0.349
YEAR	0.0607*	0.096	0.0034	0.933	0.1049**	0.012
CPATW	-0.0162	0.934	0.0354	0.874	-0.0125	0.955
CPAOTH	-0.2832	0.416	0.3851	0.332	0.2889	0.469
OTHLICEN	-0.1324	0.560	-0.0119	0.963	-0.0963	0.711
IL	0.1147	0.130	-0.0358	0.678	0.0941	0.278

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SL	0.2348**	0.017	-0.1795	0.110	0.2176*	0.054
PL	0.2323**	0.020	-0.0408	0.718	-0.1427	0.210
VIF	1.06~3.31		1.06~3.31		1.06~3.31	
F value	6.7		1.84		1.68	
p-value	<0.0001**		0.0276**		0.0517*	
R ²	0.3180		0.1133		0.1016	
Adj R ²	0.2706		0.0516		0.0423	

Variables are defined in Table 3; VIF is the variance inflation factor. It is used to test whether there is multicollinearity situation. Except the intercept is zero, the interval is listed in the table. Significant at the 5% (*) and 1% (**) levels, two-sides test.

demographics, gender and education are both significant variables for OC. Additionally, the auditing field and holding American CPA and/or other professional licenses are imperative factors in the US, while job position level and working tenure are noteworthy influences in Taiwan. This study effectively recognizes the diagram for managers to boost OC via LS with respect to different countries: the perceived magnitudes in OC are dissimilar and the antecedents in LS came from diverse perspectives.

In other words, this study successfully supplies answers not only for what to amplify in OC but also for how to increase OC, as well as how to decrease turnover. The findings might provide international CPA firms some valuable implications for better performance in both financial and human resource management (Mowday, 2007). However, there are some inherent limitations in this research. For example, the statistical results might be different if the data had been collected from smaller or medium-sized CPA firms. Inconsistent outcomes might also be found in other geographic areas. Regarding the future research direction, in addition to LS, some other antecedents and/or consequences of OC (that is, motivation, monetary incentives, organizational

organizational culture, and job satisfaction) shall be examined in future research.

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