



THE EFFECTS OF EMPLOYEES' ORGANIZATIONAL CITIZENSHIP BEHAVIOR UPON ORGANIZATIONAL PERFORMANCE IN TAIWAN-LISTED FAMILY BUSINESSES

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ABSTRACT

In the era of economic globalization, family businesses are unquestionably the most important and most common type of business organizations around the world and the same phenomenon exists in Taiwan. The main purpose of this study is to certify and realize the effects of employees' organizational citizenship behavior on organizational performance in Taiwan-listed family businesses by using organizational commitment as the mediator. Simple random sampling is adopted to extract samples from the population whereas linear structure equation modeling (SEM) is applied to certify the validity of the overall model fit as well as the fit of the structural model and measurement model. These results show: (1) the effect of organizational citizenship behavior on organizational performance is positive but insignificant; (2) the effect of organizational citizenship behavior on organizational commitment is positive and significant; and (3) the effect of organizational commitment on organizational performance is positive. These indicate that the mediation effect of organizational commitment is absolute. Hence, the results of this study can not only help managers of Taiwan-listed family businesses understand the importance of employees' organizational citizenship behavior and organizational commitment and the benefits which bring but also serve as references for other related businesses in operational decision making.

Keywords: *Organizational Citizenship Behavior, Organizational Performance, Organizational Commitment, Family Businesses*

INTRODUCTION

Whether in developed or developing countries, family businesses are without doubt the most important and most common type of business organizations in the era of economic globalization. The same phenomenon also exists in Taiwan and family businesses have been one of the major forces dominating the Taiwanese economic system [1]. In other words, management of family businesses is a unique type of corporate governance [2]. In Taiwan, it is a rather typical business management pattern among large corporations and small and medium enterprises.

However, the family business is a family-centric business management organization type. It can be discovered from the past family business studies where frequent issues in family businesses were employee equity issues, which will further worsen the effects of both organizational trust and commitment in case these issues could not be effectively or slightly solved, by reducing the employees' job satisfaction and job performance [3]. In addition, family-oriented culture as one of the essential characteristics for family businesses, similar to those important management activities of strategic human resource policies and organizational learning, all make crucial effects on family business organizational citizenship behavior [4].

Furthermore, large family businesses, particularly the listed ones, must cultivate the solidarity between their



internal employees to establish employees' organizational citizenship behavior if the businesses would like to grasp advantages within such a rapidly changing environment; or through the employee trust on organizational perceptual commitment, have employees make positive commitment toward the organization for enhancing the organizational performance and further increasing business values that can achieve an ever growing business to strength potential sustainable development of business [3], which has been one of the current key issues worth researching. Hence, this study attempts to verify the effects of employees' organizational citizenship behavior on organizational performance in Taiwan-listed family businesses, using organizational commitment as a mediator. Therefore, the main purpose of this study makes three points as follows:

- (1) To certify and realize whether the employees' organizational citizenship behavior in Taiwan-listed family businesses has a positive and significant effect on organizational performance.
- (2) To certify and realize whether the employees' organizational citizenship behavior in Taiwan-listed family businesses has a positive and significant effect on organizational commitment.
- (3) To certify and realize whether the employees' organizational commitment in Taiwan-listed family businesses has a positive and significant effect on organizational performance.

LITERATURE REVIEW

Regarding the main constructs of this study including literature review of organizational citizenship behavior, organizational commitment and organizational performance; herewith, respective discussions are made as below:

ORGANIZATIONAL CITIZENSHIP BEHAVIOR

Basic Concepts of Organizational Citizenship Behavior

The conceptual definition of organizational citizenship behavior in this study quoted the definition made by Robbins [5], which referred to "organization members spontaneously contribute to

the organization, express their solidarity to the organization, moreover, make effects on organizational performance", and this conceptual definition was summarized from the following literature.

The concept of organizational citizenship behavior can be traced back to a study conducted by Katz [6] that involved an organization member's behavior exceeding his/her presumed role. Based on the Role Theory, organizational citizenship behavior explains how an organization member shapes his/her role and behavior as expected by the organization [7].

Organ [8] believed Organizational Citizenship Behavior would be beneficial to organizational effectiveness. Thereby, there is a close relationship between and achievement of organizational goals and organizational citizenship behavior; additionally, "Pursuit of Excellence, Improvement of Quality" has been a final purpose of the organization, and organizational citizenship behavior means organization members' behavior exceeding his/her official role ruled by the organization. Such a behavior usually is a spontaneous demonstration by organization members, and bringing a positive and long-term significance to the organizational performance [9]. How organization members behave in the organization can be regarded as organizational behavior. The origin of organizational behaviors was from Hawthorne studies that explored work motivation and social interaction being important factors deciding job performance in the organization [10].

While there is a considerable amount of literature addressing the dimensions of organizational citizenship behavior, this study was inspired by experts' theoretical models and intended to measure the "organizational citizenship behavior" variable in the four perspectives put forth by Hsieh, Lang and Chen [11], namely "identification with the organization," "assisting colleagues," "non-profit" and "respect-work spirit". In this study, the operational definition of organizational citizenship behavior is based on the definitions/categorization proposed by Hsieh [11].



Organizational Commitment

This study adopts the definitions made by Mowday, Porter and Steers [12] to have the concept of organizational commitment defined as “organization members identify their organizational goals and values with each other, and they are willing to contribute additional effort for the organization, and the degree for assisting the organization to achieve its goals” [13]. Moreover, this study also adopts definitions/categorization made by Mowday et al [12]: (1) retention commitment; (2) value commitment; and (3) effort commitment as main constructs with each operational definition as follows: (1) value commitment: it indicates organization members’ faith in strongly believing and accepting the organization’s goals and values; (2) effort commitment: it indicates organization members’ effort and willingness to pursue the organization’s interest; and (3) retention commitment: it indicates organization members’ strong desire for holding an identity of the organization member.

As for the conceptual definition of the above, Organizational Commitment is summarized from the following literature.

The concept of organizational commitment is derived from The Organization Man by Whyte [14], who describes the organization man as one that “not only works for the organization, but also belongs to it.” [15]. Moreover, organizational commitment is a key factor for understanding employees’ work behavior inside the organization.

Organizational commitment can be considered the relative intensity of an individual’s recognition of, and dedication to, the organizations’ goals and missions [16]. Not only does it improve the solidarity among employees and the organization that hires them, it further creates a specific sense of pride for those belong to the organization [17]. In addition, Mowday et al [12] believed excellent individuals could create mutually good interaction and effects by organizational commitment and connections.

Price & Mueller [18] deemed organizational commitment as the loyalty and a form of emotional

attachment toward the organization. Considering the relevant costs occurring by leaving the organization, this definition of organizational commitment indicates an obligation to stay in the organization [19]. As for the definition of organizational commitment, it varies among scholars depending on their theories and research approaches.

Mowday et al [12] in a questionnaire-based survey of state-run enterprises went on to name these three inclinations as three dimensions, namely the value commitment, retention commitment and effort commitment.

In their study on employees of psychologist’s training centers, Porter et al [16] concluded that organizational commitment is the degree of an individual’s recognition of, and dedication to, a specific organization. They argued that members generally show three inclinations regarding the organization they belong to: (1) strong belief and acceptance of the organization’s goals and values; (2) the longing for staying a part of that organization; and (3) the willingness to work in that organization’s best interests.

Furthermore, Mowday et al [12] proposed excellent individuals would produce great interaction and effects on each other via organizational commitment and organizational connection, and they also focused on survey researches of public businesses and further classified these findings into three dimensions according to three inclinations to organizational commitment as described above: (1) Value Commitment; (2) Retention Commitment; and (3) Effort Commitment.

Meyer et al [19] said the foundation on which organizational commitment is defined could be explained in three aspects: (1) Affective attachment; (2) attachment due to the perceived cost; and (3) attachment due to moral factors such as obligations and rules and they named the three findings as affective commitment, continuance commitment and normative commitment respectively [19].

Wu [20] underscored the importance of how much an individual identifies with his/her organization and shows commitment/loyalty toward it. The higher the degree of commitment, the more eagerly an



individual considers him/herself an integral part of the organization.

According to Chen and Yu [21], organizational commitment is an attitude/behavior displayed by an organizational member who approves of the organization's objectives, feels proud of being part of the organization, behaves in loyalty to the organization, and expresses willingness to strive toward organizational goals.

In summary, the definitions of organizational commitment vary depending on the research approaches, subjects and purposes, but the above-mentioned scholars all agreed that an individual's approval of, and dedication to, an organization is an important concept behind organizational commitment. Many Taiwanese studies have been conducted using retention commitment, value commitment and effort commitment [12] as major constructs [22]. The three constructs have been proven highly valid in measuring organizational commitment.

Robbins [5] deemed the organizational commitment one of work attitudes, that is, employees' identification with specific organization and its goals, and the degree of maintaining the relationship between internal members.

Organization Performance

The conceptual definition of organizational performance in this study quote the definition made by Ling and Hung [23], which referred to "organization performance means an organization and its relevant operations and departments have jobs completed before deadline for the purpose to achieve phased or overall goals of the organization"; Meanwhile, this study discuss the measurement dimensions of corporate performance also quote from Kaplan & Norton [24] about "financial dimension" and "non-financial dimension" in the perspectives of the balanced scorecard. Conceptual Definition and dimensions of categories for Organizational Performance were inspired by the following literature.

Bonoma & Clark [25] discovered businesses tended to use profitability, sales growth rate, market share and cash flow to measure their financial dimension.

Vorhies & Morgan [26] pointed out that companies can measure three performance indicators while judging whether organizational marketing capabilities are competitive enough to shape the organizational advantage. In order to effectively measure whether marketing capabilities have the competitive advantage, these three measurement indicators all are necessarily set up as a mutually comparative basis between the company and major competitors. However, these three measurement indicators show respective features and contents:

(1) Customer Satisfaction: This indicator contains various measurements of actions to enhance customer satisfaction. For example: customer satisfaction, delivering capabilities of customer values, capabilities to satisfy customer demands, retaining valuable customers, and so on.

(2) Market Effectiveness: This indicator is mainly applied to measure the company's capabilities of achieving various marketing-related goals. For example: market share growth, sales growth, growing number of new customers, growth of additionally existing customer sales, and so on.

(3) Expected or Current Profitability: This indicator mainly measures a company's annual profitability in the last year, and expectation of profitability for the coming year. For example: profitability of business units, return on investment, return of sales, capabilities to achieve financial goals, and so on.

It was discovered from the research of Baldwin & Clark [27] that sales growth rate, profit rate and market share are most frequently adopted by businesses for performance measurement indicators.

Atkinson & McCrindell [28] believed the development trends of performance systems commonly improve financial indicators (such as additional economic value), and can lead the organization to retrospectively consider non-financial indicators (such as customer satisfaction, employee satisfaction, product defect rate, and so on).



Tatikonda [29] studied and indicated that a performance management system with only focus on short-term financial goals will waste business limit resources during such a changing environment; Therefore, what a business needs is a dynamic performance measurement system, that is, a new financial performance with innovative visions.

There is a massive amount of literature on the measurement dimensions of organizational performance. Since the benefits of organizational performance will eventually be fed back to the financial dimension, most scholars adopt financial performance as one of the measurement indicators. In an environment characterized by convenient means of information delivery and fast-changing markets; nevertheless, a company nowadays shall never solely rely on financial performance for survival and competitiveness. That is to say, it is impossible to sufficiently gauge organizational performance using financial performance as the sole indicator [23]. Moreover, Ling et al [23] agreed the organizational performance referred to an organization and its relevant operations and departments have jobs completed before deadline for the purpose to achieve phased or overall goals of the organization.

Kaplan et al [24] stressed businesses should not excessively depend on the financial perspective in terms of strategic goal achievement, and then must have financial and non-financial perspectives. In other words, the measurement of financial performance must start from company's financial and non-financial perspectives, in which non-financial one includes these three perspectives: (1) Customer Perspective; (2) Internal Process Perspective and (3) Learning and Growth Perspective.

RELEVANT LITERATURE TO ORGANIZATIONAL CITIZENSHIP BEHAVIOR AND ORGANIZATIONAL COMMITMENT

The literature of relevance between organizational citizenship behavior and organizational commitment has not been much discussed as seen from the following literature.

Tuan [30] held that organizational support and commitment, Leader-Member Exchange with Organizational Citizenship Behavior and service performance by role, all showed positive and significant relationships.

Based on the above description, the following hypothesis is deduced from this study:

Hypothesis1 (H1): The employees' organizational citizenship behavior (OCB) in Taiwan-listed family businesses has a significantly positive effect on the organizational commitment (OC).

RELEVANT LITERATURE TO ORGANIZATIONAL COMMITMENT AND ORGANIZATIONAL PERFORMANCE

The relevance between organizational commitment and organizational performance can be known from the following literature.

Ge [31] indicated business organizational commitment did not make significant relevance to the organizational Performance, as well as believing business partial training quality would make significant relevance to business organizational performance by the mediation of organizational commitment.

Chang [32] commented that employees with higher Organizational Commitment would make more positive effects on Organizational Performance.

Hsu, Chang, Wu and Tsao [33] discovered good internal marketing in five-star hotels was able to increase employees' performance by increasing employees' organizational commitment.

The study results of Yang [34] showed that internal marketing has a positive and significant effect on organizational commitment; and then, organizational commitment further positively influenced organizational performance.

The above descriptions are summed up and the following hypothesis is deduced from this study:



Hypothesis 2 (H2): Employees' organizational commitment (OC) in Taiwan-listed family businesses has a significantly positive effect on organizational performance (OP).

RELEVANT LITERATURE TO ORGANIZATIONAL BEHAVIOR AND ORGANIZATIONAL CITIZENSHIP PERFORMANCE

The relevance between Organizational Citizenship Behavior and Organizational Performance can be known from the following literature. Podsakoff and Mackenzie [35], and Podsakoff, Ahearne and Mackenzie [36] separately studied insurance and paper making industries in the United States that discovered most Organizational Citizenship Behavior dimensions have positive effects on group performance. And then, study results of Wang [37] and Guo [38] both found out Organizational Citizenship Behavior and organizational effectiveness show a positive correlation. Robbins [5] also indicated "Organizational Citizenship Behavior" means "Employees engages in spontaneous and unconditioned behaviors beyond official job requirements; Nevertheless, such behaviors are helpful to the enhancement of organizational effectiveness".

Wu and Huang [39] deemed there is relevance between Organizational Citizenship Behavior and Organizational Performance;

Chang [40] pointed out Organizational Citizenship Behavior will effect Organizational Performance;

Huang [41] believed service-oriented organizational citizenship behavior has a partial mediation effect on high-performance human resource management, productivity and turnover rate;

Hsieh [42] also indicated service-oriented organizational citizenship behavior has a partial mediation effect on high-performance human resource management and the productivity of organizational performance;

Lee [43] believed service-oriented organizational citizenship behavior has a partial mediation effect on high-performance human resource management and turnover rate;

Hsiao [44] agreed organizational citizenship behavior has a positive and significant effect on the organizational performance.

Based on the above analyses, the hypothesis is deduced from this study as follows:

Hypothesis 3 (H3): The employees' organizational citizenship behavior (OCB) in Taiwan-listed family businesses has a positive and significant effect on the organizational performance (OP).

RESEARCH FRAMEWORK

In accordance with the described study purposes, hypotheses and literature as above, the following research framework can be achieved as in Figure 1:

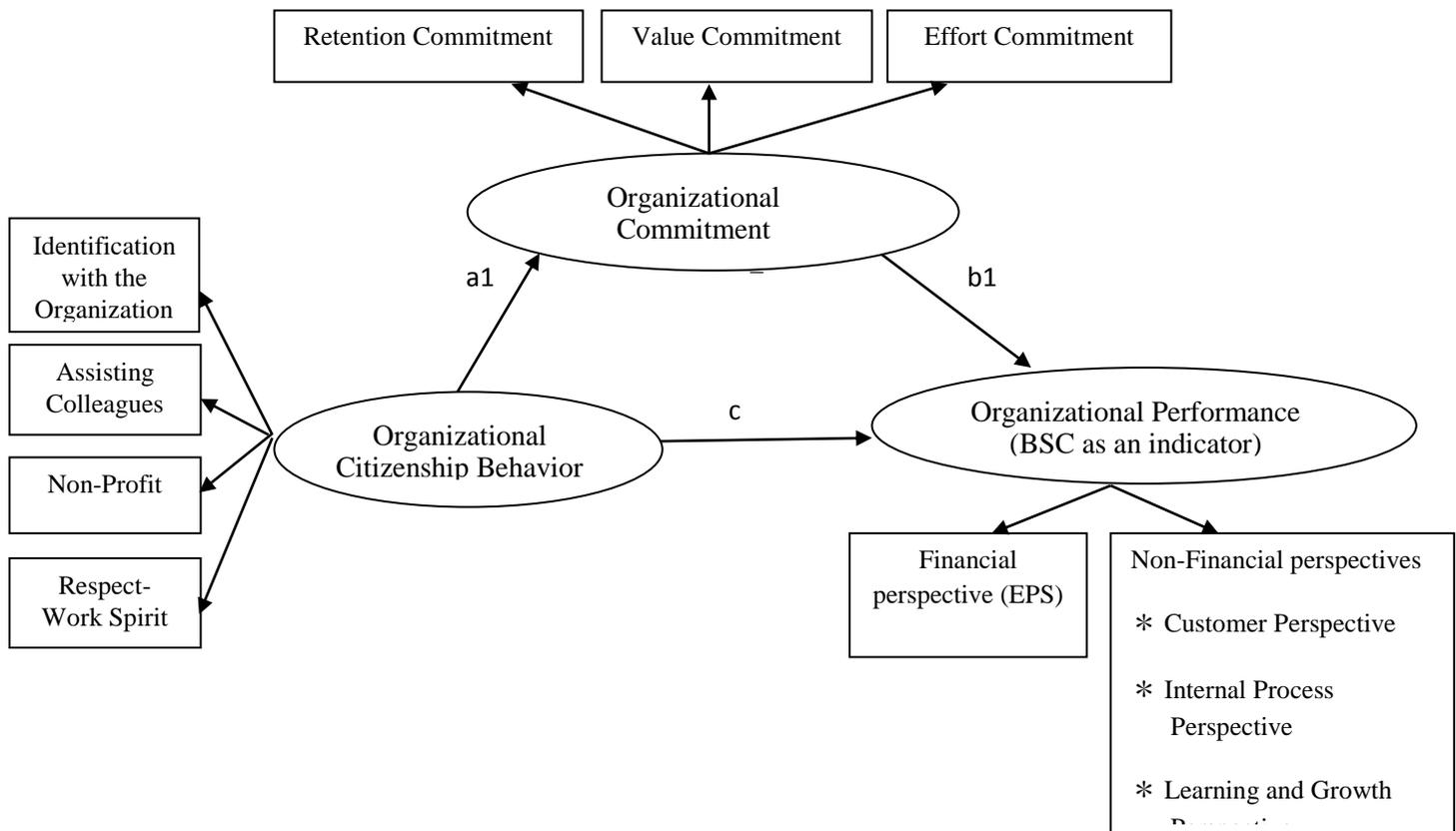


Figure 1 Research Framework

RESEARCH METHODOLOGY

Research Subjects and Questionnaire Design

Executives above section manager level from Taiwan-listed family businesses are selected to be subjects of this study, adopting Simple Random Sampling for testing. To enhance the Content Validity and Reliability of the questionnaire, thereby, questionnaire are given out to experts in a pilot-test before working on respective questionnaires, and the Pilot test implement next to modify or exclude inappropriate questions of the questionnaire. Eventually, the Post-test is operated to have the executives above section manager level from Taiwan-listed family businesses being the subjects receiving samples, totally sending out 650 copies of questionnaire, with a receipt of 216 copies valid response questionnaire for a 33.23% response rate. The Structure Table of questionnaire question numbers for variables within the main construct

(Conceptual Dimension) and sub-construct (Operational Measurement Dimension) is shown as Table 1. Additionally, something worthy of attention was the questionnaire of measurement dimension for the organizational performance. Based on the purpose to further understand Taiwan-listed family businesses' organizational performance, the financial performance-related measurement indicators are developed from the measurement indicators of the subject companies' Earnings per Share (EPS) from year 2003 to 2013, and these indicators are obtained from Taiwan Economic Journal (TEJ) Database. As for non-financial performance perspective, it conformed to the non-financial performance dimensions of Kaplan et al [24] : (1) Customer Perspective; (2) Internal Process Perspective; and (3) Learning and Growth Perspective, designing each own questionnaire.



THE DATA OBTAINED FROM QUESTIONNAIRE AND MEASUREMENT MODEL

To validate the research framework, this study uses SEM (structural equation modelling) for a confirmatory factor analysis (CFA). The questionnaire are constructed on the basis of three latent variables (i.e., organizational citizenship behavior, organizational commitment and organizational performance), each is divided into observable/explicit sub-variables that contain several questions. The data collected was processed to create a primary file for the questionnaire. As for the establishment of measurement model, this study designs the questionnaire by way of Multi-Dimension Measurement but adopts the Dual Measurement method to ensure successful data processing by computer software as Chen expressed [45] .

The questionnaire in this study did not have CMV problems after applying the CFA test comparison method for this model-“one causality, one mediator” and the results are shown as Table 1.

Model	χ^2	DF	$\Delta\chi^2$	ΔDF	P
Single-Factor	1326.1	97	884.9	99	0.000
Multiple-Factor	441.2	196			

Table 1 CMV Test Results

Linear Structural Equation Model

This study conducts a CFA, an analytical approach contrary to the Exploratory Factor Analysis (EFA), on each pair of the three main dimensions (i.e., organizational citizenship behavior, organizational commitment and organizational performance). Made up of structural and measurement models, SEM effectively addresses the cause-effect relations among implicit variables. Models in this study are verified in three regards: (1) whether the overall model conforms to the goodness-of-fit indicators; (2) goodness-of-fit of the measurement model; and (3) goodness-of-fit of the structural model.

Test results regarding fit of the overall model

This study builds the overall model framework following a literature review and a factor analysis of sample data and, as recommended by Hair, Anderson, Tatham & Black [46] , measured the overall model’s goodness-of-fit in three different ways: The Measures of Absolute Fit, the Incremental Fit Measures, and the Parsimonious Fit Measures. The test results are listed in Table 2 [47] .

Table 2 Test Results Regarding Fit of the Overall Model

Indicators		Standards of Judgment	Test Results
Measures of Absolute Fit	GFI	>0.9	0.913
	AGFI	>0.8	0.902
	RMR	<0.05	0.028
Incremental Fit Measures	NFI	>0.9	0.902
	CFI	>0.9	0.901
Parsimonious Fit Measures	PGFI	>0.5	0.581
	PNFI	>0.5	0.573

RESULTS AND ANALYSIS

CMV Test



Measurement model

The factor loading measures the intensity of linear correlation between each item under the manifest/explicit variables (or sub-constructs) and latent/implicit variables (or main constructs). The closer the factor loading is to 1, the more capable an observable variable (or sub-construct) is in measuring the main constructs. This study proves reliable with an above-0.7 factor loading in any sub-construct. That is, all sub-constructs (i.e., explicit variables) in the proposed measurement model properly measure the main constructs (i.e., implicit variables). Meanwhile, the Average Variance Extracted (AVE) measures the unobservable/implicit variables' explanatory power of variance regarding observable

ones; a higher AVE suggests greater reliability and convergent validity of an implicit variable. Fornell and Larcker [48] discovered that it usually takes an above-0.5 AVE to prove a perspective's explainable variance exceeds the measurement error. As AVEs in this study invariably exceeded 0.5, the latent/implicit variables have excellent reliability and convergent validity (See Table 3 and Figure 2).

Table 3 Judgment Indicators for the Measurement Model

Implicit Variables	Measurement Variables	Factor loading	Cronbach's α	Average Variance Extracted (AVE)
Organizational Citizenship Behavior (OCB)	Identification with the Organization (CO)	.81	.80	.63
	Assisting Colleagues (AC)	.82	.81	.65
	Non-Profit (NP)	.84	.82	.67
	Respect-Work Spirit (RS)	.82	.80	.63
Organizational Commitment (OC)	Retention Commitment (RC)	.81	.81	.64
	Value Commitment (VC)	.83	.82	.65
	Effort Commitment (EC)	.82	.81	.66
Organizational Performance (OP)	Earnings per Share (EPS)	.82	.88	.75
	Customer Perspective CP)	.83	.86	.69
	Internal Process Perspective (IPP)	.79	.78	.61
	Learning and Growth Perspective (LGP)	.84	.82	.67



Coefficient of Determination

Also known as Squared Multiple Correlation (SMC), the Coefficient of Determination is an implicit independent variable’s explanatory power regarding an implicit dependent one. That is, the R2 values shown in Table 4 indicate that the implicit independent variables have adequate explaining power on the implicit dependent variables respectively.

Table 4 Path Coefficient of Determination

Coefficients of Determination	R ²
Organizational Citizenship Behavior (OCB)→Organizational Commitment (OC)	0.73
Organizational Commitment (OC)→Organizational Performance (OP)	0.76
Organizational Citizenship Behavior (OCB)→Organizational Performance (OP)	0.41

Path coefficient of implicit variables in the model

After the model passed an internal goodness-of-fit test, the estimates of standardized path coefficients and Critical Ratio (C.R.) for latent/implicit variables, were calculated (see Table 5).

Table 5 Parameters of Latent Variables Estimation

	Estimate	S.E.	C.R.	P
Organizational Citizenship Behavior (OCB)→Organizational Commitment (OC)	.532	.164	3.244	***
Organizational Commitment (OC)→Organizational Performance (OP)	.651	.178	3.657	***
Organizational Citizenship Behavior (OCB)→Organizational Performance (OP)	.161	.123	1.309	

Remark: *** It indicates a significant C.R. Value (p<0.001).

Source: This study



Correlation analysis

The results indicate that all the correlations between factors are significant. As can be seen, the relationships between research variables are as follows:

(1)OCB is a somewhat positively related to OP; (2) OCB is positively related to OC; and (3) OCB is positively related to OP; as shown in Table 6.

Table 6 Correlation matrix

Dimensions	CO(1)	AC(2)	NP(3)	RS(4)	RC(5)	VC(6)	EC(7)	EPS(8)	CP(9)	IPP(10)	LGP(11)
CO(1)	1.000										
AC(2)	.551***	1.000									
NP(3)	.385***	.483***	1.000								
RS(4)	.482***	.381***	.193	1.000							
RC(5)	.482***	.484***	.482***	.491***	1.000						
VC(6)	.482***	.483***	.476***	.582***	.761***	1.000					
EC(7)	.523***	.513***	.776***	.778***	.781***	.782***	1.000				
EPS(8)	.102	.103	.281	.172	.673***	.621***	.681***	1.000			
CP(9)	.131	.132	.272	.271	.773***	.774***	.781***	.472***	1.000		
IPP(10)	.121	.123	.281	.174	.772***	.773***	.653***	.452***	.462***	1.000	
LGP(11)	.132	.121	.123	.181	.774***	.772***	.773***	.553***	.552***	.662***	1.000

***denotes p<0.001

Source: This study

The standardized results path of SEM analysis

By using AMOS software, this study gets an illustration of the standardized path analysis results which is shown as below.

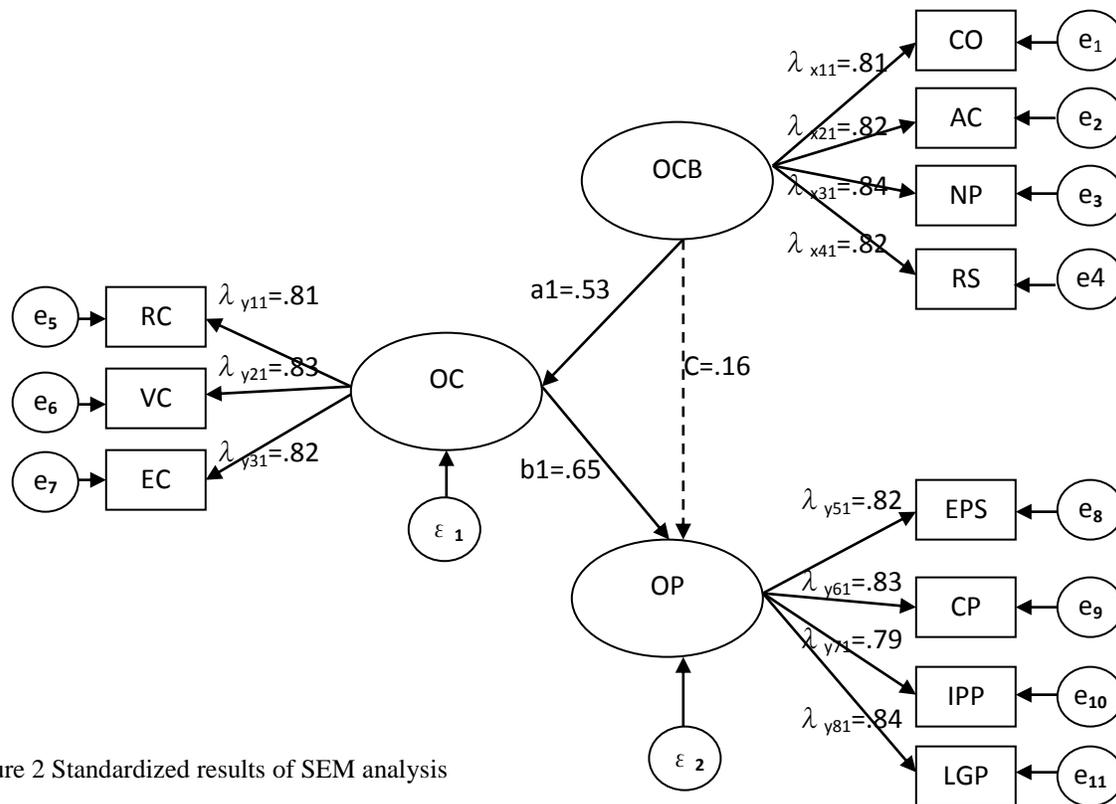


Figure 2 Standardized results of SEM analysis

From figure 2, the results are as follows:

- (1) The employees' organizational citizenship behavior (OCB) in Taiwan-listed family businesses has a positive and significant effect on organizational commitment (OC); with the parameter value of standardized estimate $a1=0.532$, the Hypothesis H1 is supported. (Hypothesis is substantiated).
- (2) The employees' organizational commitment (OC) in Taiwan-listed family businesses has a positive and significant effect on organizational performance (OP); with the parameter value of standardized estimate $b1=0.651$, the Hypothesis H2 is supported. (Hypothesis is substantiated).
- (3) The employees' organizational citizenship behavior (OCB) in Taiwan-listed family businesses has a positive but insignificant effect on organizational performance (OP); with the parameter value of standardized estimate $c=0.161$, the Hypothesis H3 is denied. (Hypothesis is not substantiated).

Analytical Test of Path Effect for the "Structural Model"

Focused on the path coefficients between implicit/unobservable variables in the structural model, this study adopts "Bayesian Estimation" for an analytical test to determine the structural model's path effect, with intellectual capital (ME) as the mediator, as shown in Tables 7 & 8.

- (1) Organizational Citizenship Behavior (OCB) versus Organizational Commitment (OC), Path Coefficient $a1=0.532$, 95% Confidence Interval (0.368, 0.696), it shows that first-order Efficacy has reached a significant level.
- (2) Organizational Commitment (OC) versus Organizational Performance (OP), Path Coefficient $b1=0.651$, 95% Confidence Interval (0.473, 0.829), it



shows that second-order efficacy has reached a significant level.

Coefficient $c=0.161$, 95% Confidence Interval (0.038, 0.284), it shows that direct efficacy has not reached a significant level.

(3) Organizational Citizenship Behavior (OCB) versus Organizational Performance (OP), Path

Table 7 Bayesian Estimation

Regression weights	Mean	STDEV	95% Lower bound	95% Upper bound	Name
Organizational Citizenship Behavior (OCB)→ Organizational Commitment (OC)	.532	.123	.368	.696	a1
Organizational Commitment (OC)→ Organizational Performance (OP)	.651	.178	.473	.829	b1
Organizational Citizenship Behavior (OCB)→ Organizational Performance (OP)	.161	.124	.038	.284	c

Source: This study

Table 8 Sobel Test: Bootstrapping→ Path Coefficients (Mean, STDEV, t-Values)

	Mean	STDEV	95% Lower bound	95% Upper bound	T Statistics (Mean/ STDEV)
First-order indirect efficacy (a1)	.532	.123	.368	.696	4.325
Second-order indirect efficacy (b1)	.651	.178	.473	.829	3.657
Direct efficacy (c)	.161	.124	-.038	.284	1.298
Indirect efficacy (a1 *b1)	.346	.103	.223	.469	3.359
Total efficacy (c+a1 *b1)	.507	.133	.344	.670	3.812
Proportion of indirect efficacy to total efficacy	.682	.162	.500	.864	4.210

Source: This study

The following findings are obtained from Table 8:

(1) The estimated indirect efficacy $a1*b1$ was =0.346, 95% confidence interval (0.223, 0.469), the estimated proportion of indirect efficacy to total efficacy =68.2%. It shows that indirect efficacy has reached a significant level.

(2) Owing to significant indirect efficacy, but only positive but insignificant direct efficacy, “organizational commitment” is a “complete” mediator.

CONCLUSIONS AND SUGGESTIONS

According to the afore-mentioned analyses and results, this section specifies the conclusions, research limitations and suggestions for the future research.



CONCLUSIONS

Taking a panoramic view of previous discussion, executives above section manager level from Taiwan-listed family businesses are selected to be subjects of this study, as well as sub-data of Taiwan Economic Journal Database [50] were deliberated, using the SEM model to verify the effects of Organizational Citizenship Behavior on Organizational Performance: Using the Organizational Commitment as a mediator; herewith the study conclusion is specifically described as below.

As for the Relevance of Organizational Citizenship Behavior Effects on Organizational Commitment, these results show the substantiated Hypothesis H1, that is, “Organizational Citizenship Behavior makes positive and significant effects on Organizational Commitment”, which is in conformity with the opinions from the study results of Tuan [30] .

Regarding the Relevance of Organizational Commitment Effects on Organizational Performance, these results show the substantiated Hypothesis H2, that is, “Organizational Commitment makes positive and significant effects on Organizational Performance”, such a result being in conformity with the opinions from the study results of Ge [31] , Chang [32] , Hsu et al [33] , and Yang [34] .

As Regards the Relevance of Organizational Citizenship Behavior Effects on Organizational Performance, the Hypothesis H3 is substantiated from these results, that is, “Organizational Citizenship Behavior makes positive but insignificant effects on Organizational Performance”, such a result being inconformity with the opinions from the study results of Chang [40] , Huang [41] , Hsieh [42] , Lee [43] and Hsiao [44] , possibly in concern of industry characteristics.

Generally, according to three conclusions as above, this study establishes a model with fair fitting degree, and the employees’ organizational commitment in Taiwan-listed family businesses has the “complete” mediation effect. This conclusion reaches an agreement with the Baron and Kenny [49] thesis of “complete” mediation effect meaning a weaker or

less significant relationship between independent and dependent variables after adding mediating variables.

RESEARCH LIMITATIONS

This study suffers from limited resources, although it seeks to complete all the stages of research tasks in a manner as robustly as possible. Below is a list of research limitations:

(1) This study adopts the Simple Random Sampling for the sampling of the population that resulted in a lower response rate of valid samples.

(2) This study uses EPS as a measurement indicator for Organizational Performance; thereby, this indicator is from the sub-data of Taiwan Economic Journal Database that cannot fully guarantee 100% accuracy of the data. Hence, the study’s data may not completely and accurately present corporate performance.

Suggestions to Follow-up Studies

Owing to the studies on the relevance between Organizational Citizenship Behavior, Organizational Commitment and Organizational Performance being applicable to various industries and, not just limited to Taiwan-listed family businesses, and additionally, with researchers having different definitions on organizational citizenship behavior and organizational commitment, using different organizational performance measurement indicators, only executives above section manager level from Taiwan-listed family businesses were selected to be sampling subjects of this study. Future researchers could try out the effects of organizational performance on different characteristics and industries for the purpose of a wider-range data or innovation and breakthroughs, and then, they are expected to analyze good qualities and accomplish comparisons between different industries.

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