

Effects of Organizational Commitment on Turnover Intention in Workforce of the Food & Beverage Industry in Taiwan: A Meta-Analysis

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Abstract: This paper aims at gaining an understanding on the effects of organizational commitment on turnover intention in the workforce of the food & beverage industry in Taiwan. Data is collected from the literature in Taiwan and overseas and a meta-analysis is conducted. The study indicates a significant and negative impact of organizational commitment on turnover intention in the workforce of the food & beverage industry in Taiwan.

Keywords: Organizational commitment, Turnover intention, Meta-Analysis

I. INTRODUCTION

As a result of economic development and industry transformation, the working population in the service industry surpassed that in industries in Taiwan in 1988. Since then, the service industry has been the largest employer on the job market. The booming development of restaurants in Taiwan has prompted the industry to enhance service quality with grouping management and standardized procedures. This has paved the way for rapid expansion of many restaurant brands [1].

People are a valuable resource for corporates. Effective management of human resources is the key to competitiveness. It is important to effectively utilize capital, materials, equipment, technology and workforce. Human resources are the dominant factor of resource allocations. In fact, organizational climate and incentives are highly influential to employee behavior in the system of human resources. The success of business management depends not only on market competitiveness and profitability, but also employee coherence and work attitude [2].

All the business owners agree that employees are an asset. Human resources management is also on the top of corporate agenda. However, different generations have different personalities and work values as a result of the different eras and economic environment they grow up in. This means various levels of work satisfaction even within the same organization. Corporate managers and human resources supervisors have found it a headache to deal with the high turnover among the young people born in the 1980s [3].

Therefore, this paper conducts a meta-analysis in order to gauge the influence of organizational commitment on turnover intention in the workforce of the restaurant industry in Taiwan. This is the main purpose of the study.

II. LITERATURE REVIEW

To understand the research findings in the past, this paper conducts a literature review on the relevant issues:

Organizational commitment

This paper defines the concept of organizational commitment as the alignment of the goals and values between an organization and its members, and the willingness of its members to make extra efforts to achieve the organizational targets. Organizational commitment is the relative intensity of the recognition and dedication from its members, who would like to continue being part of the organization.

This definition is the synthesis of the following literature:

Mowday, Steers & Porter [4] believed that organizational commitment is the relative intensity of the recognition and dedication from individuals to a specific organization. Organizational commitment is the conviction members have in organizational goals and values. The willingness to embrace the organizational goals and values cannot be ignored.

Chen [5] indicated that organizational commitment is the acceptance and support of organizational objectives and values by members, who are willing to go the extra mile to assist in the achievement of organizational goals.

Ko [6] posited that organizational commitment from an individual is based on the cost associated with departing from the organization based on the perceptions from others, and hence the decision to remain in the organization. Organizational commitment is the psychological or emotional attachment towards an organization. It is a perceived obligation and responsibility for employees to stay in the organization and support the organizational values.

Tsai [7] believed that organizational commitment is the acknowledgement by organizational members of the organizational goals and values. Based on resources exchange and interests involved between individuals and the organization, organizational commitment is a rational decision with emotional elements. This means members are willing to dedicate themselves and stay as part of the organization.

Cheng [8] posited that organizational commitment is a psychological status of identifying with the organization.

Cheng [9] indicated that organizational commitment is the level of identification with the organization and the desire to continue to stay within the organization. Organizational members are more than willing to dedicate themselves to the organization. In fact, they consider the organization as part of their life.

Shen [10] suggested that organizational commitment is the acceptance and acknowledgement by individuals of the organizational goals and values, hence the alignment of personal efforts and organizational objectives with the accompanying willingness and attitude.

Chiu [11] contended that organizational commitment is the loyalty and identity with organizational goals, convictions and values, and the willingness to make efforts accordingly and stay with the organization. In sum, organizational commitment is an attitude and behavior.

Turnover Intention

This paper defines the concept of turnover intention as the deliberate decision to leave the current job or position after spending some time in an organization. It is the decision for an employee to terminate his/her contract with the organization.

This definition is the synthesis of the following literature:

Mobley [12] argued that turnover intention is a key indicator to determine whether an employee would quit. If an organization can stay on top of turnover intention, it will help to predict the departure of employees.

Farh [13] believed that turnover intention is a psychological status before departure. It is the measurement of the subjective feelings of employees, not the indication of the actual behavior. Turnover intention is also the inclination of an individual eager to leave the current role and seek other job opportunities.

Colarelli [14] indicated that turnover intention is the desire to leave the current job, after careful consideration and spending some time in the organization, or the active seeking of other job opportunities.

Zheng [15] indicated that turnover intention is the desire to leave a job after an individual has assessed the work environment and acknowledged the meaningfulness of leaving.

Pan [3] suggested that turnover intention is the desire to leave an organization or a company, i.e. the intention to terminate the contract with the organization.

Literature on the Relationship between Organizational Commitment and Turnover Intention

Below is a summary of the literature on the correlation between organizational commitment and turnover intention.

Tao [16] held that organizational commitment has a significant and negative effect on turnover intention.

Hsia [17] held that organizational commitment and turnover intention are inversely correlated.

Lee [18] posited that organizational commitment has a negative impact on turnover intention.

Chen [19] believed that organizational commitment has a significant and negative effect on turnover intention.

Wang [20] pointed out the negative impact of organizational commitment on turnover intention.

Chuang [21] suggested that job satisfaction and organizational commitment have negative and significant effects on turnover intention of restaurant employees.

Chang [22] mentioned that leadership styles are positively correlated with organizational commitments but negatively correlated with turnover intention.

Above is a summary of the literature on the two dimensions, organizational commitment and turnover intention, in this study. A meta-analysis is conducted on random effects in order to examine the effect of organizational commitment on turnover intention.

III. RESEARCH METHODOLOGY

Based on the above research motivations, objectives and literature review, this paper establishes research hypotheses and constructs the research model and the research structure accordingly (Fig. 1).

Research Structure

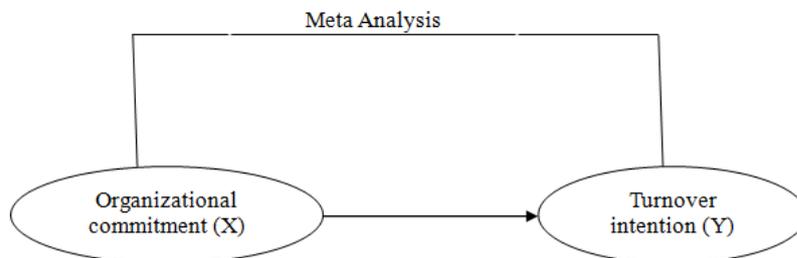


Figure 1 Conceptualization of Research Structure

Data Collection and Method

This paper conducts a meta-analysis with the Stata software. The working presumption is that the estimation parameters follow a normal distribution. In the case of greater heterogeneity (i.e. standard deviations), it is better to use random effects than fixed effects. Therefore, this paper examines random effects to compare results [23].

Theoretic Foundation for Meta-Analysis [24]

1. The Highlight of DerSimonian & Laird Method (Random effect method)

- (1) For binary or continuous outcomes
- (2) Effect size q_i for study i could be In (OR), In (RR), RD, difference in means or standardized mean difference.
- (3) Note that the effect sizes for OR and RR are logged.
- (4) Assumption that there is a single true answer that all studies are trying to estimate is relaxed.
- (5) Now assume that each study has a different true answer that they are trying to estimate.
- (6) Assume true effect sizes θ_i have normal distribution with mean θ and variance τ^2 .
- (7) τ^2 is the between-study variance.
- (8) Between study variance:

$$\tau^2 = \frac{Q - (k - 1)}{\sum_i w_i - \left[\frac{\sum_i w_i^2}{\sum_i w_i} \right]}$$

Where:

w_i are weights from the fixed effect inverse-variance method

Q is the heterogeneity test statistic form before (either form inverse-variance method or Mantel-Haenszel method)

K is the number of studies, and

τ^2 is set to zero if $Q < k - 1$

- (9) Random effect pooled estimate is weighted average:

$$\theta_{DL} = \frac{\sum_i w'_i \theta_i}{\sum_i w'_i}$$

- (10) Weights used for the pooled estimate are similar to the inverse-variance, but now incorporate a component for between-study variation:

$$W'_i = \frac{1}{SE(\theta_i)^2 + \tau^2}$$

- (11) When there is little heterogeneity, so Q is smaller than $k-1$, $\tau^2=0$ and the weights are the same as the inverse-variance method.
 (12) When $\tau^2>0$ the weights are smaller and more similar to each other than in a fixed effect model.
 (13) Because the weights are smaller, the sum of weights will be smaller, and so the SE will be bigger, CIs wider, and p-values less significant.
 (14) Small studies will have relatively greater influence.
 (15) Advantages:
 a. As widely applicable as the inverse-variance fixed effect model
 b. Incorporates heterogeneity into the model

2. Confidence interval for pooled estimate

A 95% CI for the pooled estimate θ is:

$$\theta - (1.96 * SE(\theta)) \text{ to } \theta + (1.96 * SE(\theta))$$

For ratios, θ is the log-transformed estimate.

3. Test for overall effect

Overall significance test for whether the pooled estimate is significantly different from zero (no effect):

$$z = \frac{\theta}{SE(\theta)}$$

Look up z in tables of the normal distribution to get the p-value.

For ratios, θ is the log-transformed estimate.

4. Test for heterogeneity

- (1) Look up Q in tables of the chi-squared distribution on $k-1$ degrees of freedom. The null hypothesis is that the true effect size is the same for all studies.
 (2) A statistically significant result means that there is strong evidence against there being one common effect size, so we take it that there is heterogeneity.

5. Getting Data into Stata

- (1) Easier to enter into Excel then cut & paste into Stata's data editor
 (2) Ensure each numeric column contains only numbers
 (3) Leave cells empty if data missing
 (4) One row per study

IV. RESULTS AND ANALYSIS

The results of the meta-analysis on random effects are summarized in Table 1.

Table1: Random Effects

Study		WMD (95% CI)	% Weight
Tao [16]		-6.13(-5.94, -6.32)	14.31
Hsia [17]		-6.03(-5.82, -6.24)	14.14
Lee [18]		-6.02(-5.73, -6.31)	14.11
Chen [19]		-6.64 (-5.93, -7.34)	14.66
Wang [20]		-6.68 (-5.84, -7.52)	14.71
Chuang [21]		-5.94 (-5.34, -6.53)	13.96
Chang [22]		-6.02 (-5.62, -6.41)	14.11
Overall (I-squared=62.1%, p=0.001)		-6.21 (-5.75, -6.67)	100.00
NOTE: Weights are from random effects analysis			
Scale Range		-7 -6 -5 -4 -3 -2 -1	

The above results show an overall I-squared= -62.1 and p-value=0.001, indicating that the independent variable has significant and negative impacts on the dependent variable.

V. CONCLUSIONS AND SUGGESTIONS

Conclusions

The above results suggest that organizational commitment has a significant and negative impact on turnover intention of the workforce in the food & beverage industry in Taiwan. This is consistent with Tao [16], Hsia [17], Lee [18], Chen [19], Wang [20], Chuang [21] and Chang [22], despite of different weights.

Research Contributions

The literature review finds that most studies use regressions for exploratory research purposes. Few studies apply meta-analysis. This adoption of meta-analysis by this paper is relatively a novel approach.

The research findings can serve as a template for restaurant management in the pursuit of sustainable operations. In other words, the research results are a valuable reference to practitioners.

Research Restrictions and Suggestions

This paper conducts the analysis only on the employees of the food and beverage industry. Therefore, the findings are not applicable to non-employees in the industry.

Meanwhile, this paper focuses on the restaurants in Taiwan and conducts a meta-analysis on relevant literature in Taiwan and overseas, in order to understand the influence of organizational commitment on turnover intention in the workforce of the food and beverage industry. Follow-up studies are suggested to examine other industries or the companies in the same industry with different scales, or explore with other research techniques such as confirmatory factor analysis in the analysis of different industries or comparison of model fit for different sectors.

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