The Impact of Leadership to Job Satisfaction and Job Performance – An Empirical Study in the Taiwanese Gaming Machine Manufacture Industry Employees

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Abstract

This study is to explore the relationship between leadership, job satisfaction, and job performance in a gaming machine manufacture with social support as moderating variable which is to test whether there is moderating effect causing by social support between leadership and job satisfaction. This study subject is 125 employees from gaming machine manufacture in Taiwan. The results reveal that leadership has significant positive impact on job satisfaction; job satisfaction has significant positive impact on job performance and social support has no moderating effect between leadership and job satisfaction.

Keywords: Gaming Industry; Social Support; Leadership; Job Satisfaction; Job Performance.

1. Introduction

According to the data of Gaming Inspection and Coordination Bureau Macao SAR, the sales revenue of gaming industry in Macao in 2013 is USD$45.2 billion. It increases 18.6% more than that of 2012 and is about 7 times comparing to that in Las Vegas. The GDP per capita of Macao is USD$91,376, which makes Macao the 4th richest area in the world. After became part to China in 1999, Macao became a global gaming center. During these 14 years, the GDP of Macao increased 557% with population of 0.6 million (Gaming Inspection and Coordination Bureau Macao SAR, 2014). The gaming industry truly increases the revenue of people in Macao. Because of its tremendous economic benefit, casinos are now available in South Korea, Nepal, Vietnam, Cambodia, Singapore, and Philippines. Other countries in Asia are also considering whether to run gaming industry.

Gaming machine is one of the major games in casino. As the casino in Asia is growing, so does the demand of gaming machines will increase? Therefore, the importance of gaming industry will increase as well. Employees are the most important asset in the company that their job satisfaction will have a direct impact on personal performance then company operation. Job satisfaction will make employees willing to cooperate with organization to achieve its goal, be more interested in their work, and be proud of being a part of organization (Davis, 1951). Heskett (1994) regarded that job satisfaction will influence job performance. Hallowell (1996) suggested if an organization wish to delivery good service to external customers, it must satisfy its internal customers, first. Base on this argument, he pointed out “There are no satisfactory customers if there are no satisfactory employees”. Kenneth (2000) indicated that there is a significant relationship between employee satisfaction and customer satisfaction, and how to maintenance of customer loyalty will have significant impact on the of organization performance.

However, to achieve good business performance, not only need good employees but also need excellent leaders to build the right culture for the organization, so it could enhance the employees job satisfaction and the performance of the organization. The basic organizational behavior model submitted by Robbins (1996) also indicates that leadership will have impact on productivity, turnover, absence, and job satisfaction of employees. During the fast development of economy, pressures from work and family also become unavoidable for individuals. Therefore, social support becomes an important issue in recent years. Many research found that social support can release personal pressure (Tomas &

The design and manufacturing of gaming machine is a high technology industry. However, people tend to have negative thought of this industry during its rareness. Therefore, this study would like to explore the relationship between leadership, social support, job satisfaction, and job performance. It is hoped the result can reveal the true situation of this industry and make the public to get the whole picture, and also hope the result could provide the managers of this industry when they plan the strategies for their companies.

Based on above, the purposes of this study are to explore: 1. The relationship between leadership and job satisfaction; 2. The relationship between job satisfaction and job performance; 3. Whether social support has a moderating effect between leadership and job satisfaction.

2. Literature Review

2.1 Leadership

Most scholars who study leadership theory and development regard trait, behavior, and situations theory as traditional leadership theory. After 1980’s, there was a new development of leadership theory called new or contemporary leadership theory (Hunt et al., 1988; Bryman, 1992) which contains Charismatic Leadership Theory, Transformational Leadership Theory, and Transactional Leadership Theory.

Stogdill (1974) concluded that leaders’ characters are ability, achievement, responsibility, participation, socioeconomic status, and prestige. Bennis & Nanus (1985) proposed that fundamental trait leadership factors contain vision, passion, integrity, trust, curiosity, and courage. Robbins (1998) considered that leadership trait theory is leaders with some unique traits.

Behavior theory is to explore whether there is any behavioral difference between leader and non-leader. Lewin, Lippitt & White (1939) submitted three leaderships: Democratic Leadership, Authoritarian Leadership, and Laissez-faire Leadership. Halpin & Winer (1957) divided leadership as Initiating Structure and Consideration; it was also called two dimension theories. The continuum of leadership behaviors theory proposed by Tannenbaum & Schmidt (1958) regarded that leadership behavior is a sequential dimension. Democracy and dictatorship are not opposite but a sequential dimension. Likert (1961, 1967) divided leadership into four types: Exploitive-authoritative, Benevolent–authoritative, Consultative-democratic, and Participate-democratic.

Developed in the late 1960’s, Situations Theory, regarded that no leadership can apply to all situations without consideration of situation factor. Fiedler Contingency Model proposed that group performance was decided by the appropriate cooperation between “the interactive between leader and subordinates” and “how well can leader control and influence situation”. House’s Path-goal theory proposes 4 types of leaderships: Directive Leadership, Supportive Leadership, Participative Leadership, and Achievement-oriented Leadership.

House (1977) proposed charismatic leadership theory with three traits on leaders: extreme confidence, firm belief, and strong intention to influence others. In addition, they present high expectation and confidence to subordinates. Burns (1978) defined the transformational leadership as a process to have influence among people. During this process, leader proposes higher concept and value attempting to make employees put organizational benefit before their owns. Bass & Avolio (1994) submitted four dimensions of transformational leadership as Idealized Influence or Charisma, Inspirational Motivation, Intellectual Stimulation, and Individualized Consideration.

In conclusion, it is found that most modern leadership theories use the way of encouragement and inspiration to lead employees. Leader tries to clearly convey business target to employees with their recognition so that employees will work hard towards organizational target. Therefore, this study measures leadership indicator by Charisma, Inspirational Motivation, Intellectual Stimulation and Individualized Consideration based on the theory of Bass & Avolio (1994).

2.2 Job Satisfaction

Hoppock (1935) proposed job satisfaction refers to the psychological and physiological feeling of employees to environment. That is, employees’ subjective reactions to their works. Definitions from each scholar can be summarized to Overall Satisfaction, Expectation Discrepancy, and Frame of Reference.

Fournet, Distefano & Margaret (1966) mentioned that factors which influence job satisfaction are personal and working. Weiss, Dawis, England & Lofquist (1967) separated job satisfaction to internal, external, and overall aspects. In addition, Simth, Kendall & Hulin (1969) proposed that factors impacting on job satisfaction are salary, promotion, supervisor, colleague, and job itself. Seashore & Taber (1975) defined cause and effect variables as factors to influence job satisfaction that primarily causal variables include environment and person and consequents contain individual, organizational and societal responses.

The dimensions of job satisfaction proposed by Weiss et al. (1967) included intrinsic, extrinsic, and general aspects which cover more cause and effect of job satisfaction and meet the purposes this study would like to explore. Due to this
study is for the measurement of job satisfaction based on intrinsic and extrinsic characteristics of employees, Weiss et al. (1967) short-form of Minnesota Satisfaction Questionnaire (MSQ) was adopted for this empirical study.

2.3 Job Performance

Performance refers to a measurement how well it achieved to the specific target. Byars & Rue (1994) defined performance as the level of job realization by employees to measure their present job performance. Porter & Lawler (1968) proposed that job performance is comprised of quantity and quality of performance as well as level of endeavor. Campbell (1990) regarded job performance as behavior which organizational members performed to complete the demand expected, requested, or formalized by organization.

From the study of Korman (1977), factors that have impact on job performance are work motivation, skill and ability, and role perception. Blumberg & Pringle (1982) concluded that there are capability, willingness, and opportunity factors for job performance. Campbell (1990) submitted that there are direct and indirect factors.


To sum up, job performance can be viewed as the level employees achieve organizational target during the specified period. That is, to measure job representation of employees so that management will understand it and further more to accomplish business goal. Therefore, this study uses the view of Lee (1999) to measure job performance by efficiency, effectiveness, and quality.

2.4 Social Support

Firstly submitted by Caplan (1974), support system begins all the research relevant to social support. According to House (1981), social support is an social interaction which includes emotional concern, instrumental aid, and information and analysis to meet basic demand such as emotion, self-esteem, appreciation, belonging, recognition, and a sense of security so to free from pressure and stay healthy. Based on Cutrona (1996), support system is a way to search for support from his owned social network such as family members, friends, neighbors, and others to satisfy certain demands when individual is under a situation with pressure. In Guralnick, Hammond, Neville & Connor (2008), support from social network is from formal and informal resources.

There are different views for the function of social support among scholars. For instance, Sarason, Levine & Basham (1983) found that social support plays a very important role on physical and mental health. House & Kahn (1985) thought that social support can satisfy individual demand on security, affirmation, belonging, social contact, and emotion as well as release life pressure to stay healthy. In the study of Zimet, Dahlem, Zimet & Farley (1988), it confirmed that higher social support can release pressure and anxiety.

Brown (1974) separated social support to informal and formal resources. Thoits (1986) thought that social support is a favorable assistance from important partners, such as family members, friends, neighbors, colleagues, and relatives. Zimet, Dahlem, Zimet & Farley (1988) developed Multidimensional Scale of Perceived Social Support (MSPSS) from study of university students and divided the resources of social support into family, friends, and significant others.

Social support is usually divided into instrumental, socioemotional, and information aid by scholars when they analyze its dimension. This study separates the resources of social support from working and non-working. The former one includes supervisor and co-workers and the later one contains family members and friends. In addition, dimension of measurement is divided into support from supervisor, co-workers, friends, and family members. Scale was made by reference of multidimensional scale of perceived social support by Zimet, Dahlem, Zimet & Farley (1988).

3. Research Method

3.1 Research Framework

This study is mainly to explore whether the leadership in gaming industry will have impact on job satisfaction and performance through the moderation of social support. The research framework of this study was established as Figure 1 by aggregating the above literature review.
3.2 Hypothesis

Darshan & Shibru (2011) tried to describe the concepts of transformational leadership and its effect on subordinate job satisfaction. The study confirmed that transformational leadership is an important leadership style to increase subordinate job satisfaction. Rothfelder, Ottenbacher & Harrington (2013) examined the influence of different leadership behaviors of hospitality managers on employee job satisfaction. The results suggest that hotel employee job satisfaction is strongly affected by leadership behavior. Lin & Tseng (2013) tried to understand the current conditions of campus security work executives at Taiwan's private universities. Regression analysis shows that leadership behavior and psychological empowerment have a significant positive impact on job satisfaction. Mak & Chan (2014) studied the relationship between servant leadership, subordinates' trust in leader and job satisfaction in a service-oriented private firm. The findings indicate that trust in leader mediated the relationship between servant leadership and subordinates' job satisfaction. Men's (2014) study shows that transformational leadership positively influences the organization's symmetrical internal communication and employee relational satisfaction. Thus, this study hypothesizes that:

**H 1:** There is positive relationship between leadership behavior and job satisfaction.

Gunavathy & Ayswarya (2011) tried to trace the relationship between emotional intelligence, job satisfaction and job performance. Data analysis revealed that there was a statistically significant positive relationship between emotional intelligence, job satisfaction. Baruah & Barthakur (2012) tried to reveal if the employee attitudes can be directly associated with clients' satisfaction and service delivery performance in Non-Governmental Sector. Results reveal that there is a positive correlation between clients' satisfaction and service performance. Ziegler, Hagen & Diehl (2012) studied the relationship between job satisfaction and job performance to managers of an IT company. They find out that higher job satisfaction related to higher performance. Krush, Agnihotri, Trainor & Krishnakumar (2013) examined the importance of resiliency in the challenging context in which salespeople balance both career and family roles. Their findings suggest that job satisfaction positively influences the job performance. Thus, this study hypothesizes that:

**H 2:** There is positive relationship between job satisfaction and job performance.

Jung, Hyun & Kim (2009) found that social support will increase job satisfaction, productivity, and life quality as well as decrease turnover. From Kinmana, Wrayb & Strangea (2011) that was based on 628 junior high school teachers in England as participants, it is found that social support can reduce emotional demand from emotional burnout, personal achievement, and job satisfaction. Through 270 workers, their co-workers, and their spouse, Fergusona, Carlsons, Zivnuskac & Whittend (2012) explored how social support achieve satisfaction through the balanced relationship between work and family. The result indicated that the satisfaction from work and family will be influenced by the support of co-workers and spouse. Chen, Sun, Lam, Hu, Huo & Zhong (2012) examined how the emotional labor of hotel employees was associated with affective and behavioral outcomes. They found that supervisory support moderated the relationships between emotional labor and job satisfaction and burnout. Cullen, Edwards, Casper & Gue (2014) examined the influence of employees' adaptability and change-related uncertainty on their interpretation of organizational actions and the mediating role of perceived organizational support as explanations for employees' job satisfaction and performance. Results support the role of perceived organizational support as a mediator of the relationship between employees' adaptability and uncertainty and employees' satisfaction and performance. Based on the argument, we hypothesize that:

**H 3:** Social support plays the role as a mediator of the relationship between leadership behavior and job satisfaction.

3.3 Definitions and Measurement of Variables
This study adopts four dimensions, Idealized Influence or Charisma, Inspirational Motivation, Intellectual Stimulation, and Individualized Consideration, of transformational leadership submitted by Bass & Avolio (1994). Questions from Podsakoff, MacKenzie, Moorman & Fetter (1990) was referred for this questionnaire. The measurement dimensions of job satisfaction were modified as internal and external satisfaction from MSQ by Weiss, Dawis, England & Lofquist (1967). For job performance, this study chooses classification by Lee (1999) that divided it into efficiency, effectiveness, and quality as well as its questionnaire for measurement. The measurement dimensions of social support are support from direct supervisor, co-workers, and friends and family members. Its questionnaire was modified from multidimensional scale of perceived social support by Zimet, Dahlem, Zimet & Farley (1988).

3.4 Questioners Design

The questionnaire of this study was designed from the above operational definition and measurement which was divided into two parts. There are correspondent items of four research variables in the first part and personal information in the second part. Each question was scored by Likert five level scales.

4. Statistical Analysis

4.1 Data Analysis of Samples

Characteristics of sample are shown in Table 1. There are 56 male participants with 44.4% of total samples among the 125 returned effective questionnaires of this study. Female participants account for 55.6% of total samples. Therefore, this study has nearly balanced participants for gender perspective. The ages of samples are mainly between 21 to 30 with 43.2% of total samples then 31 to 40 with 41.5% of total samples. Hence, the participants of this study are mainly between 21 to 40 years old. The sampling result indicates that there are 76.5% participants who are non-supervisors and 63% single participants. For education background, most participants are graduated from colleges. For seniority years, most of them have less than 3 years employment history with 66.8% of total samples.

<table>
<thead>
<tr>
<th>Items</th>
<th>Categories</th>
<th>Percent (%)</th>
<th>Items</th>
<th>Categories</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>44.4%</td>
<td>Occupation</td>
<td>Supervisor</td>
<td>23.5%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>55.6%</td>
<td></td>
<td>Non-Supervisor</td>
<td>76.5%</td>
</tr>
<tr>
<td>Age</td>
<td>21-30</td>
<td>43.2%</td>
<td>Education</td>
<td>High school</td>
<td>13.1%</td>
</tr>
<tr>
<td></td>
<td>31-40</td>
<td>41.5%</td>
<td></td>
<td>Junior college</td>
<td>36.1%</td>
</tr>
<tr>
<td></td>
<td>41-50</td>
<td>13.2%</td>
<td></td>
<td>College</td>
<td>45%</td>
</tr>
<tr>
<td></td>
<td>51-60</td>
<td>2.1%</td>
<td>Tenure(year)</td>
<td>Less than 1</td>
<td>26.2%</td>
</tr>
<tr>
<td>Marriage</td>
<td>Single</td>
<td>63%</td>
<td></td>
<td>1-3</td>
<td>40.6%</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>35.4%</td>
<td></td>
<td>4-6</td>
<td>18.8%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>1.6%</td>
<td></td>
<td>7-9</td>
<td>8.9%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Over 9</td>
<td>5.5%</td>
</tr>
</tbody>
</table>

4.2 Reliability and Validity

The reliability test result of each scale in this study is shown in Table 2. The Cronbach's $\alpha$ of leadership, job satisfaction, job performance, and social support is 0.964, 0.905, 0.735, and 0.904. These four numbers are all greater than 0.7 which indicates that the reliability of each measurement is in the acceptable level.
### Variable, Item numbers, Cronbach’s α

<table>
<thead>
<tr>
<th>Variable</th>
<th>Item numbers</th>
<th>Cronbach’s α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>24</td>
<td>0.964</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>16</td>
<td>0.905</td>
</tr>
<tr>
<td>Job Performance</td>
<td>9</td>
<td>0.735</td>
</tr>
<tr>
<td>Social Support</td>
<td>18</td>
<td>0.904</td>
</tr>
</tbody>
</table>

#### 4.3 Regression Analysis

Through the regression analysis of “leadership to job satisfaction” and “job satisfaction to job performance”, this study explores between variables and verifies if there is any interference of social support. The regression analysis of leadership to job satisfaction is shown in Table 3. With 0.481 of adjusted R2 and 0.000 of p value (p<0.1), it is known that this model is significant. In addition, the positive significance of leadership to job satisfaction means that higher job satisfaction will appear when the leader is more transformational leadership type.

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Dependent variable</th>
<th>β value</th>
<th>Adj. R²</th>
<th>t value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>Job satisfaction</td>
<td>0.698</td>
<td>0.481</td>
<td>8.644</td>
<td>0.000***</td>
</tr>
</tbody>
</table>

*p<0.1  **p<0.05  ***p<0.01

The regression analysis of job satisfaction to job performance is shown in Table 4. With 0.118 of adjusted R2 and 0.000 of p value (p<0.1), it is known that this model is significant. In addition, the positive significance of job satisfaction to job performance means that better job performance will appear when there is better job satisfaction.

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Dependent variable</th>
<th>β value</th>
<th>Adj.R²</th>
<th>t value</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job satisfaction</td>
<td>Job performance</td>
<td>0.359</td>
<td>0.118</td>
<td>3.417</td>
<td>0.001***</td>
</tr>
</tbody>
</table>

*p<0.1  **p<0.05  ***p<0.01

The moderating effect analysis of social support to leadership and job satisfaction is shown in Table 5. With 0.524 of adjusted R2, it is known that the independent variable in model 1 significantly influences dependent variables. After added moderating variable in model 2, there is no significant moderating effect to job satisfaction. Therefore, social support doesn’t have significant moderating effect for the impact leadership has on job satisfaction.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M1</td>
</tr>
<tr>
<td>Leadership</td>
<td>0.489***</td>
</tr>
<tr>
<td>Social Support</td>
<td>0.305***</td>
</tr>
<tr>
<td>Leadership</td>
<td></td>
</tr>
<tr>
<td>Social Support</td>
<td></td>
</tr>
<tr>
<td>Leadership x Social Support</td>
<td>-0.022</td>
</tr>
<tr>
<td>F value</td>
<td>45.120</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.524</td>
</tr>
</tbody>
</table>
Based on the analysis result as shown in Table 6, this study concludes that both “H1: Leadership has significant positive influence on job satisfaction.” and “H2: Job satisfaction has significant positive influence on job performance.” are true. However, social support doesn’t have significant moderating effect for the impact leadership has on job satisfaction.

### Table 6: Hypothesis Summary

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Leadership has significant positive influence on job satisfaction.</td>
<td>True</td>
</tr>
<tr>
<td>H2: Job satisfaction has significant positive influence on job performance.</td>
<td>True</td>
</tr>
<tr>
<td>H3: Social support has moderating effect for the impact leadership has on job satisfaction.</td>
<td>False</td>
</tr>
</tbody>
</table>

### 4.4. Discussion

This study found that leadership has significant positive influence on job satisfaction. That is, job satisfaction will be greater if the leader is more like transformational leadership that is identical with the result from Darshan & Shibu (2011), Rothfelder, Ottenbacher & Harrington (2013), Lin & Tseng (2013), Mak & Chan (2014), Men(2014). In addition, job satisfaction has significant positive influence on job performance which means that better job performance will appear when there is better job satisfaction. This result is as same as the argument Gunavathy & Ayswarya (2011), Baruah & Barthakur (2012), Ziegler, Hagen & Diehl (2012), Krush, Agnihotri, Trainor & Krishnakumar (2013). However, social support doesn’t have moderating effect for the impact leadership has on job satisfaction. Therefore, this study verifies the first hypothesis H1: Leadership has a significant positive influence on job satisfaction and the second hypothesis, H2: Job satisfaction has a significant positive influence on job performance.

Based on the collected questionnaires, leadership from leaders indeed has direct impact on job satisfaction then job performance, that is, business profitability. It is found from questionnaires that employees agree with most of the leaderships from management. Therefore, this company shall keep present leadership and care to employees. It is identical with the point of view from Hallowell (1996) and Kenneth (2000) that there is a significant relationship between employee’s job satisfaction and customer’s satisfaction, and maintenance of customer loyalty will have impact on the growth of organization’s performance.

Although this company has established for 20 years, from the returned data, employees who had less than 3 years job tenure account for 76.8% and employees between 21 to 40 years old account for 84.7%. This result indicates that the average job tenure of employees is low with high turnover. Therefore, this company should find the problems and solve them. High turnover means low recognition to the company as well as it will cause higher training cost and business loss resulted from employee’s unfamiliarity of work.  

In addition, there is enough support from supervisors, co-workers, family members, and friends for employees. It is said that most employees are from well functional family with good social relationship. Hence, similarity will be appeared on the personality characteristic of employees. When employees share the same personalities, there is less conflict between employees and it is easier for management as well. However, it should be noticed that company will have less innovation and creativity when employees characteristic are similar and it will become a potential business risk when faced with rapid changing environment.

### 5. Conclusion and Further Research

As countries in Asia are gradually opening for the gaming industry, the demand of equipment is bound to increase. Gaming machine is one of the most important device in this industry, although the majority of public does not understand and tend to have negative impression of this industry. After all the research, this study finds out, gaming industry is actually the same as the high-tech industry. But, for most peoples’ negative attitude towards this industry, the leadership of the organization and supports from surrounding people are keys for how employees look at their jobs.

If the leader has led charm, giving staff individual care, stimulating and encouraging employees at the appropriate time will enable organizations to be more competitive in a rapidly changing environment. If people could get good emotional, instrumental and information aid support from their supervisors, co-workers, friends and relatives, they will adopt to work stress easier and also have better job satisfaction and performance.

This study explores the variables of leadership, job satisfaction, job performance, and social support variables for organization behavior. The result verified that leadership has significant positive influence on job satisfaction and job satisfaction on job performance. Although social support doesn’t have moderating effect for the impact leadership has on...
job satisfaction, its moderating effect to work pressure already verified by other researches from other scholars. It is hoped that this result can be a reference to management.

Because of constraints of time and company regulations, this study only focused on an gaming manufacturer but overall industry. It is suggested that in the future, researchers may continue this research by different research dimension or differential analysis of measurement or area.

References


