

# The Impact of Change Management on Employee Satisfaction and Engagement

Ju-Chun Chien

**Abstract**—The main purpose of this study was to figure out employees' attitudes toward the new performance appraisal program and to examine whether three different types of appraisal processes differentially affected job satisfaction and employee engagement. The second purpose of this study was to investigate the relationship between performance appraisal reform, job satisfaction, and employee engagement. A large polyester and textile corporation had 2046 non-operational employees in February 2014. The valid participants were 1474 (72.04%) in this study. Data analysis included descriptive statistics, one-way ANOVA, one-way MANOVA, Pearson correlation, Content Validity Index, the exploratory factor analysis, and reliability analysis. The general results showed that employees who received the new performance appraisal program evaluated the program more positively and showed more job satisfaction than those who did not. In particular, the implementation effects of this new performance appraisal program were most highly rated by employees who used the KPI to rate their job performance. Moreover, employees' attitudes toward the new performance appraisal program were positively related to their job satisfaction and employee engagement. Lastly, most employees regarded themselves as engaged workers. To sum up, the HR department of this company has made an effective contribution to performance appraisal reforms.

**Keywords**—Change management, Employee engagement, Job satisfaction, Performance appraisal reform.

## I. INTRODUCTION

GLOBALIZATION, increased market competition, technological innovation, workforce diversity, etc., had shaped trends of human resource management [1], [2]. The human capital had gradually been regarded as the key factor to business success and sustainability [3]. Moreover, today's human resource managers needed to be more sophisticated on how to manage change and be capable of providing evidence-based practices for strategic alignment [4]–[6]. Among the field of strategic human resource management, performance appraisal could be an effective managerial tool for HR managers to move forward and to achieve greatness. Previous studies also revealed that by means of objective and fair structure appraisal evaluations could increase employees' productivity and their work commitment [7], [8], retention probability [9], job satisfaction [10], and engagement [11], [12]. However, less than 1/3 employees agreed that company's performance appraisal system could actually increase their job performance [11]. In addition, among the results of many job satisfaction surveys, the performance management component was often revealed to be the least satisfied [13]. In Taiwan, for

the purpose of increasing business sustainability, a large polyester and textile company's HR department conducted employee satisfaction surveys in 2011 and 2012, the results were both pointed out that there was a need to make organizational changes especially in the area of performance management. In particular, most employees felt that the current performance management system should be modified to reinforce talent engagement and productivity.

After obtaining the approval from the top management, numerous workshops and meetings were held to gather inputs on performance appraisal reform from employees and managers of the four business units (textile, polyester, research, and administrative). The new performance appraisal program was formally implemented in 2013, to be specific, there were two parts: job performance (70%) and competence (30%). However, owing to different management styles of the four business units' managers, three different types of performance appraisal processes were actually performed. For example, the textile business unit was the first test drive of the new performance appraisal program. And in 2013, the textile managers further agreed to implement KPI's to measure performance of their employees. On the other hand, even though the research business unit and the administrative business unit had completed the explanation sessions of the new PA program, their top managers still decided to use the traditional method to evaluate their employees' annual performance. Lastly, the polyester business unit accepted the new PA program conditions offered by the HR department. Therefore, the main purpose of this study was to figure out employees' attitudes toward the new performance appraisal program and to examine whether different types of appraisal processes differentially affected employees' job satisfaction and their engagement behavior. The second purpose of this study was to investigate the relationship between performance appraisal reform, job satisfaction, and employee engagement. Fig. 1 presented the simplified model of analysis considered for this study.

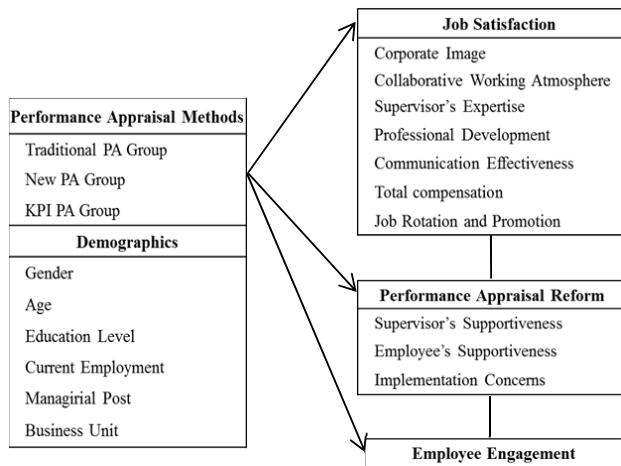


Fig. 1 Model of analysis

## II. LITERATURE REVIEW

### A. Job Satisfaction

The definition of job satisfaction (sometimes known as employee satisfaction) was first proposed by Hoppock [14]; however, the most-used definition of job satisfaction in organizational studies was that of Locke in 1976 [15], who defined it as “a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences” (p. 1304). Although there was no universal agreement on the definition of job satisfaction, in general, the definitions could be divided into three categories: (1) Overall satisfaction perspective, the researchers usually treated job satisfaction as a single type of emotional response. (2) Expectation discrepancy perspective, job satisfaction was determined by a discrepancy between what one received from and what one expected of, the desired aspects of the job. (3) Frame of reference perspective, job satisfaction was reflection of the perceived characteristics of a job in relation to the person’s frame of reference (values, goals, alternatives, desires, or experiences). In this study, job satisfaction was examined in a multidimensional perspective and was related to the degree to which an employee’s perceived work experiences match his or her expectations.

Previous studies on job satisfaction had proven that increasing employees’ job satisfaction could enhance their loyalty and commitment [16], retention intention [17], mental health [18], and productivity [19].

In this study, in order to better capture key indicators of job satisfaction, a semi-structured interview was conducted beforehand; the construct validity was assessed through the exploratory factor analysis and there were 7 components: Corporate Image, Supervisor’s Expertise, Collaborative Working Atmosphere, Total Compensation, Professional Development, Job Rotation and Promotion, Communication Effectiveness. Many researches had revealed that each component had a significant positive correlation with job satisfaction [20].

### B. Performance Appraisal Reform

Performance appraisal referred to the process of assessing an employee’s job performance based on preset standards on a regular basis for purposes of evaluation and development. In particular, by means of a sound performance appraisal process, it affected compensation, promotion, and training program at a significant level [21], it could have positive impact on human capital [22], could better align performance to organizational goals [23], [24], and could facilitate strategic human resource management [25].

Many of the early studies of performance appraisal focused more on the role of the supervisor and the attributes of the rating scales [26]. And recent related studies emphasized more on factors that affected employees’ perception of performance appraisal [27]–[31]. However, only a few studies actually examined the effectiveness of the performance appraisal reform. According to Shih (2006), by means of conducting interviews and survey methods to evaluate participants’ (22 superiors and 41 employees) attitudes toward the new performance appraisal system, the results showed that participants regarded the new PA system better than the old one. Moreover, increasing employees’ understanding of the new PA system might reduce the level of resistance toward the change [32]. Another study was about performance appraisal reform at the civil service in Uganda, the main result signified that the administrative culture undermined the effectiveness of performance appraisal and its institutionalization [33].

In comparison to the previous studies, this study took an empirical research on the effectiveness of a performance appraisal reform. Not only was the sample size large (almost 1500), but also the valid participants had at least more than one year at their current job. Therefore, this study might provide more in-depth and precise understanding of the effects of performance appraisal reform.

### C. Employee Engagement

Gallup Research Group was the first to create the concept of employee engagement. However, the definition and the measurement of it were interpreted differently by practitioners and researchers. Some scholars [34] even mentioned that it was “old wine in a new bottle” because engagement was closely related to the existing organizational constructs, such as job involvement, job satisfaction, and organizational commitment. According to [34], the concept of employee engagement could be defined in three aspects: Trait Engagement (positive views of life and work), State Engagement (feelings of energy, absorption), and Behavioral Engagement (extra-role behavior). On the other hand, the Society for Human Resource Management (SHRM) conducted its annual survey by adding two new components since 2011: engagement opinions and engagement behaviors for better understanding of what types of benefits employers offered to their employees. The definition of employee engagement in this study referred to the levels of employees’ behavior and willingness to participate in increasing organizational sustainability.

Previous studies on employee engagement had shown that increasing employees’ engagement had a positive impact on

employees' job performance [35], enhancing job satisfaction [36]–[38], and retention intention [37]. In addition, different attributes of work situation might have different levels of engagement [39].

The employee engagement scale used in this study was based on SHRM's engagement behaviors. After thorough discussion with HR managers and by means of logic tree analysis, the items of this instrument were better suited for the company.

Previous studies had further proven that there was a positive correlation between employee engagement and job satisfaction [40], [41]; in addition, organizational change also had a positive correlation with job satisfaction [42], [43]; moreover, employees' perception toward organizational change had a positive correlation and effect on job involvement, job satisfaction, and job performance [44]. On the other hand, performance appraisal satisfaction was positively correlated with employees' work performance and affective organizational commitment, respectively [45]. It seemed that job satisfaction, employee engagement, organizational change, and performance appraisal satisfaction were significantly positively correlated with each other; however, there was little evidence available about the relationship between performance appraisal reform, job satisfaction, and employee engagement.

Therefore, in the present study, the main purpose was not only to explore the effective of performance appraisal reform, but also to explore the relationship among job satisfaction, employee engagement, and performance appraisal reform.

### III. METHODS

#### A. Participants

A large polyester and textile corporation was established in Taiwan, the HR department implemented an organizational change, namely performance appraisal reform, in response to the latest employee satisfaction survey conducted in 2011 and 2012. The entire non-operational employees of this company were recorded to be 2046 people in February 2014. Owing to one of the main purposes of this study was to examine employees' attitudes toward the new performance appraisal program; the valid participants should be with more than one year at current employment. In addition, even though the details of the new performance appraisal program had been thoroughly conveyed to the entire non-operational employees several times, three different ways of performance appraisal processes were adopted in different business units due to each supervisor's management style. For the traditional performance appraisal group (TPA,  $n = 326$ ), employees were still evaluated by their supervisors based on the original method and they were mainly working at the administrative business unit and the research business unit. The polyester business unit conducted the new performance appraisal program; it was labelled as the new performance appraisal group (NPA,  $n = 789$ ). Lastly, the textile business unit further used Key Performance Indicators (KPI) to implement the new performance appraisal program; it was labelled as the KPI performance appraisal group (KPIPA,  $n = 359$ ).

Schedule of data gathering was from April 23 to June 6,

2014. There were 1474 valid participants (72.04%) in this study.

According to the demographic data, most of the employees were male (TPA:  $n = 178$ , 54.6%; NPA:  $n = 623$ , 79%, and KPIPA:  $n = 218$ , 60.7%). The TPA aged 31-40 mostly ( $n = 160$ , 49.1%), the NPA aged 51-60 mostly ( $n = 272$ , 34.5%), and the KPIPA aged 31-40 mostly ( $n = 127$ , 35.4%). The majority of the TPA had Master's degree ( $n = 147$ , 45.1%), thirty percent of the NPA had Bachelor's degree ( $n = 237$ ), and the majority of the KPIPA had Bachelor's degree ( $n = 162$ , 45.1%). Most of the TPA did not hold managerial positions ( $n = 147$ , 60.7%); however, sixty-four percent of the NPA took managerial posts ( $n = 505$ ); and sixty-one percent of the KPIPA had managerial posts ( $n = 220$ ).

#### B. Instruments

There were three self-developed questionnaires in this study: the Employee Job Satisfaction Scale (EJSS), the New Performance Appraisal Program Evaluation Scale (NPAPES), and the Employee Engagement Scale (EES). The Content Validity Index (CVI), the exploratory factor analysis (EFA), and Cronbach's alpha coefficients were used to examine the questionnaires' validity and reliability. The results revealed that these questionnaires were well-developed instruments.

The Employee Job Satisfaction Scale (EJSS) was used to gather the employees' attitudes toward their jobs. Six experts carefully reviewed the items of each subscale and the S-CVI/Ave was 0.99. The items were factor analyzed using principal components. Factors with eigenvalues greater than one were rotated using a Varimax rotation, and items that had a factor loading greater than 0.40 were extracted for interpretation. The analysis identified 7 major sources of employee job satisfaction; these factors explained 70.57% of the variance in the EJSS. The internal consistency of the EJSS for an overall coefficient alpha was 0.96 for the total scale, and Cronbach's alpha coefficients for the subscales of the EJSS ranged from 0.76 to 0.97 (see Table I). The EJSS was measured on a 7-point Likert scale (1 = Disagree Strongly, 7 = Agree Strongly), with the negative statements being reverse-scored, higher mean scores indicating more job satisfaction.

TABLE I  
MEANS, STANDARD DEVIATIONS, AND CRONBACH'S ALPHAS FOR SUBSCALES OF THE EJSS

Subscales of the EJSS ( $n = 1474$ )	# of Items	Item <i>M</i>	Item <i>SD</i>	$\alpha$
Corporate Image	4	6.12	0.83	0.88
Collaborative Working Atmosphere	4	5.78	0.87	0.84
Supervisor's Expertise	9	5.66	1.15	0.97
Professional Development	8	5.30	1.00	0.92
Communication Effectiveness	5	4.98	1.11	0.76
Total Compensation	8	4.80	1.12	0.91
Job Rotation and Promotion	3	3.98	1.30	0.78
Overall EJSS	41	5.27	0.84	0.96

The New Performance Appraisal Program Evaluation Scale (NPAPES) was designed to measure the non-operational employees' attitudes toward the new performance appraisal program. The S-CVI/Ave for the total scale was 0.99 by six

experts. The exploratory factor analysis revealed that the NPAPES had three sub-dimensions; these explained 73.49% of the total variance in the data. Overall Cronbach's alpha coefficient of the NPAPES was 0.97 and Cronbach's alpha coefficients for each subscale ranged from 0.72 to 0.96 (see Table II). The NPAPES was measured on a 7-point Likert scale (1 = Disagree Strongly, 7 = Agree Strongly), with the negative statements being reverse-scored, higher mean scores indicating more positive ratings of the new performance appraisal program.

TABLE II  
MEANS, STANDARD DEVIATIONS, AND CRONBACH'S ALPHAS FOR SUBSCALES OF THE NPAPES

Subscales of the NPAPES ( <i>n</i> = 1474)	# of Items	Item <i>M</i>	Item <i>SD</i>	$\alpha$
Supervisor's Supportiveness	9	5.23	1.22	0.96
Employee's Supportiveness	9	4.87	1.20	0.96
Implementation Effectiveness	4	4.22	1.15	0.74
Overall NPAPES	22	4.90	1.10	0.97

The Employee Engagement Scale (EES) was conducted for the purpose of studying engagement in non-operational employees. The content validity index (S-CVI/Ave) was 0.99 for the entire EES. The exploratory factor analysis showed that there was only one factor with an eigenvalue above 1 (61.28% of variance). The Cronbach's alpha coefficient was 0.91 ( $M = 43.91$ ,  $SD = 6.84$ ,  $N = 8$ ). The participants responded using a 7-point scale ranging from 1 for "Disagree Strongly" to 7 for "Agree Strongly." All items were averaged, with higher scores indicated that employees would like to put more effort and willingness to contribute to the overall success of the business.

#### IV. RESULTS

##### A. The New Performance Appraisal Program Evaluation

The average level of overall evaluation toward the new performance appraisal program was near the "somewhat satisfied" response ( $M = 4.90$ ,  $SD = 1.10$ ,  $n = 1474$ ). A one-way ANOVA was used to test whether three different performance appraisal groups had significantly different effects on the new performance appraisal program. The test was significant,  $F(2, 1471) = 11.79$ ,  $p < 0.01$ . The Sidak pairwise comparison method was used for post hoc comparisons. The findings indicated that both KPIPA ( $M = 5.05$ ,  $SD = 1.05$ ,  $n = 359$ ) and NPA ( $M = 4.93$ ,  $SD = 1.11$ ,  $n = 789$ ) employees highly valued the new performance appraisal program than the TPA ( $M = 4.65$ ,  $SD = 1.11$ ,  $n = 326$ ), respectively.

A one-way MANOVA was conducted to determine if three different kinds of performance appraisal processes differed on the three branches of NPAPES. Significant differences were found among the three types of performance appraisal processes on the dependent measures, Wilks'  $\Lambda = 0.97$ ,  $F(6, 2938) = 7.15$ ,  $p < 0.01$ . The Games-Howell post hoc tests showed that the KPIPA and the NPA revealed a significant increase than the TPA in "Supervisor's Supportiveness" and "Employee's Supportiveness," respectively. Moreover, the KPIPA revealed a significant increase than the NPA and the TPA in "Implementation Effectiveness" (see Table III).

TABLE III  
MEANS AND STANDARD DEVIATIONS OF NPAPES FOR THREE DIFFERENT TYPES OF PERFORMANCE APPRAISAL PROCESSES

Subscales of the NPAPES	KPIPA (1)	NPA (2)	TPA (3)	<i>F</i>	post hoc
Supervisor's Supportiveness	5.36 (1.19)	5.27 (1.22)	4.98 (1.22)	9.64**	1, 2 > 3
Employee's Supportiveness	5.02 (1.11)	4.92 (1.20)	4.57 (1.25)	13.86**	1, 2 > 3
Implementation Effectiveness	4.40 (1.12)	4.18 (1.17)	4.10 (1.12)	6.58**	1 > 2, 3

##### B. The Employee Job Satisfaction

The average level of overall job satisfaction reached the "somewhat satisfied" response ( $M = 5.27$ ,  $SD = 0.84$ ,  $n = 1474$ ). A one-way ANOVA was conducted using the Games-Howell post hoc comparison to determine if a difference in responses to the EJSS among three different performance appraisal groups. The test was significant ( $F(2, 1471) = 7.08$ ,  $p < 0.01$ ) and showed that both NPA ( $M = 5.33$ ,  $SD = 0.80$ ,  $n = 789$ ) and KPIPA ( $M = 5.29$ ,  $SD = 1.91$ ,  $n = 359$ ) employees had significantly higher mean scores for overall job satisfaction than the TPA ( $M = 5.12$ ,  $SD = 0.85$ ,  $n = 326$ ), respectively.

A one-way MANOVA was used to test whether different types of appraisal processes differed in the degree of respondents on the 7 job satisfaction components. The results showed that the three types of appraisal processes differentially affected job satisfaction components, Wilks'  $\Lambda = 0.97$ ,  $F(14, 2930) = 3.27$ ,  $p < 0.01$ . The Games-Howell post hoc tests indicated that the KPIPA and the NPA revealed a significant increase than the TPA in "Total Compensation" and "Professional Development," respectively. Moreover, the KPIPA revealed a significant increase than the TPA in "Corporate Image." Lastly, the NPA revealed a significant increase than the TPA in "Supervisor's Expertise" and "Communication Effectiveness," see Table IV.

TABLE IV  
MEANS AND STANDARD DEVIATIONS OF EJSS FOR THREE DIFFERENT TYPES OF PERFORMANCE APPRAISAL PROCESSES

Subscales of the EJSS ( <i>n</i> = 1474)	KPIPA (1)	NPA (2)	TPA (3)	<i>F</i>	post hoc
Corporate Image	6.17 (0.83)	6.13 (0.81)	6.01 (0.87)	3.33*	1 > 3
Supervisor's Expertise	5.61 (1.28)	5.76 (1.04)	5.49 (1.24)	6.72**	2 > 3
Collaborative Working Atmosphere	5.78 (0.89)	5.81 (0.84)	5.73 (0.90)	1.10	
Total Compensation	4.87 (1.13)	4.84 (1.10)	4.63 (1.15)	4.99**	1, 2 > 3
Job Rotation and Promotion	3.91 (1.39)	4.02 (1.25)	3.94 (1.31)	1.15	
Professional Development	5.38 (1.04)	5.36 (0.96)	5.09 (0.99)	9.63**	1, 2 > 3
Communication Effectiveness	5.00 (1.15)	5.04 (1.10)	4.81 (1.08)	5.01**	2 > 3

##### C. The Employee Engagement

The average level of overall employee engagement reached the "somewhat agree" response ( $M = 5.49$ ,  $SD = 0.85$ ,  $n = 1474$ ). A one-way ANOVA was conducted to determine if differences in engagement occurred among three different types of performance appraisal groups. The results showed that

there was no statistically significant difference among three groups ( $F(2, 1471) = 0.98, p = 0.37$ ).

#### D. Correlations among EJSS, NPAPES, and EES

A Pearson's correlation was run to examine the bivariate relationships among the overall EJSS, the overall NPAPES, and the overall EES. As Table V showed, the three scales were strongly and positively interrelated. Employees' attitudes toward the new performance appraisal program were positively related to their job satisfaction and work engagement, respectively.

TABLE V  
DESCRIPTIVE STATISTICS AND CORRELATIONS OF ALL STUDY SCALES

	Item <i>M</i>	Item <i>SD</i>	1	2	3
1. EJSS	5.27	0.84	—	0.80**	0.74**
2. NPAPES	4.90	1.10		—	0.65**
3. EES	5.49	0.85			—

#### V. DISCUSSION

Firstly, from the results of the New Performance Appraisal Program Evaluation Scale (NPAPES), both the KPI performance appraisal group and the new performance appraisal group highly valued the new PA program than the traditional performance appraisal group, respectively. Secondly, for the KPI performance appraisal group, they were not only the most favorable to the new PA program, but had also perceived more support from their supervisors and had a more positive evaluation of the implementation of the new PA program. Thirdly, both the KPI performance appraisal group and the new performance appraisal group had significantly higher mean scores for overall job satisfaction than the traditional performance appraisal group, respectively. Lastly, the relationship among job satisfaction, employee engagement, and performance appraisal reform were strongly and positively interrelated. In total, the performance appraisal reform was quite successful in this study, especially to the field of production business units. Moreover, the results also support that KPI might act as a useful tool to further implement the new PA program.

On the other hand, even though the employees from the research business unit and the administrative business unit agreed that there was an urgent need to perform organizational change especially in the area of performance management, they were still in a state of hesitation to conduct the new PA program. After holding several discussion meetings with managers of these two business units, the main concern was about the objectiveness of the new PA program. There might be some bias because there was no standardized way to evaluate their job performance objectively. The HR managers could take further consideration on the feasibility of "one size fits all" approach of performance appraisal [46].

One interesting result of this study was that most of the participants regarded themselves as engaged workers. Moreover, the proportion of the agreement rate for the employees was much higher than the results of SHRM's 2014 survey. One possible explanation would be that this company,

which was highly concerned about employees' interests and to collect their feedback periodically; therefore, employees were more willing to take actions toward the goals of this company. On the contrary, the result might be falsely evaluated due to employees were too eager to express their commitment and loyalty to please the organization.

#### VI. CONCLUSION

The aim of the present study was to evaluate the effects of a new performance appraisal program on three different kinds of performance appraisal processes by means of three questionnaires: the NPAPES, the EJSS, and the EES. The general results revealed that employees who received the new performance appraisal program viewed the program more positively and showed more job satisfaction than those who did not. In particular, the implementation effects of this new performance appraisal program were most highly rated by employees who used the KPI to evaluate their job performance. On the other hand, most employees regarded themselves as engaged workers.

Although there were some limitations to this study, such as due to the nature of the sample, the results might not be representative of those outside these demographics; moreover, the self-report measures could be inflated or deflated, the research results confirmed that the HR department of this company has made an effective contribution to performance appraisal reforms.

#### REFERENCES

- [1] G. Dessler, *Human Resource Management*. Taipei: Pearson, 2013, ch. 1.
- [2] D. L. Stone, and D. L. Deadrick, "Challenges and opportunities affecting the future of human resource management," *Human Resource Management Review*, vol. 25, no 2, Jun. 2015, pp. 139–145.
- [3] G. Spreitzer, and C. L. Porath, "Creating sustainable performance," *Harvard Business Review*, vol. 90, no. 1-2, Jan.-Feb. 2012, pp. 93–99.
- [4] S. M. Kimani, and S. M. Waithaka, "Factors affecting implementation of talent management in state corporations: A case study of Kenya broadcasting corporation," *International Journal of Business and Social Research*, vol. 3, no. 4, Apr. 2013, pp. 42–49.
- [5] P. Sparrow, E. Farndale, and H. Scullion, "An empirical study of the role of the corporate HR function in global talent management in professional and financial service firms in the global financial crisis," *International Journal of Human Resource Management*, vol. 24, no. 9, Apr. 2013, pp. 1777–1798.
- [6] F. Tonelli, S. Evans, and P. Taticchi, "Industrial sustainability: Challenges, perspectives, actions," *International Journal of Business Innovation and Research*, vol. 7, no. 2, Jan. 2013, pp. 143–163.
- [7] D. Abdulsalam, and M. A. Mawoli, "Motivation and job performance of academic staff of state universities in Nigeria: The case of Ibrahim Badamasi Babangida University Lapai, Niger State", *International Journal of Business and Management*, vol. 7, no. 14, Jul. 2012, pp. 142–148.
- [8] E. Deepa, and S. Kuppusamy, "Impact of performance appraisal system on job satisfaction, employee engagement, organizational citizenship behavior and productivity," *Indian Journal of Applied Research*, vol. 4, no. 2, Feb. 2014, pp. 4–6.
- [9] E. N. C. Hong, L. Z. Hao, R. Kumar, C. Ramendran, and V. Kadirasan, "An effectiveness of human resource management practices on employee retention in institute of higher learning - A regression analysis," *International Journal of Business Research and Management*, vol. 3, no. 2, Apr. 2012, pp. 60–79.
- [10] R. Karimi, M. I. Malik, and S. Hussain, "Examining the relationship of performance appraisal system and employee satisfaction," *International Journal of Business and Social Science*, vol. 2, no. 22, Dec. 2011, pp. 243–247.

- [11] J. A. Gruman, and A. M. Saks, "Performance management and employee engagement," *Human Resource Management Review*, vol. 21, no. 2, Jun. 2011, pp. 123–136.
- [12] V. Gupta, and S. Kumar, "Impact of performance appraisal justice on employee engagement: a study of Indian professionals," *Employee Relations: The International Journal*, vol. 35, no. 1, 2013, pp. 61–78.
- [13] E. D. Pulakos, *Performance management: A new approach for driving business results*. MA: Wiley-Blackwell, 2009, pp. 1–214.
- [14] R. Hoppock, *Job satisfaction*. New York: Harper and Brothers, 1935, p. 47.
- [15] E. A. Locke, The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology*. Chicago: Rand McNally, 1976, pp. 1297–1343.
- [16] S. Suma, and J. Lesha, "Job satisfaction and organizational commitment: The case of Shkodra municipality," *European Scientific Journal*, vol. 9, no. 17, Jun. 2013, pp. 41–51.
- [17] T. L. Zontek, C. C. DuVernois, and B. R. Ogle, "Job satisfaction and issues related to the retention of environmental health professionals in North Carolina," *Journal of Environmental Health*, vol. 72, no. 3, Oct. 2009, pp. 10–15.
- [18] E. B. Faragher, M. Cass, and C. L. Cooper, "The relationship between job satisfaction and health: a meta-analysis," *Occupational and Environmental Medicine*, vol. 62, no. 2, Feb. 2005, pp. 105–112.
- [19] T. Chen, P. Chang, and C. Yeh, "An investigation of career development programs, job satisfaction, professional development and productivity: the case of Taiwan," *Human Resource Development International*, vol. 7, no. 4, 2004, pp. 441–463.
- [20] J. Chien, "Examining Herzberg's two factor theory in a large Chinese chemical fiber company," *International Science Index*, vol. 7, no. 6, Jun. 2013, pp. 1433–1438.
- [21] L. Chi, "Performance management: Exploring the status of outcome in securities industry of Taiwan," unpublished master's thesis, National Taiwan University of Science and Technology, Taipei, 2010.
- [22] B. Kuvaas, "Performance appraisal satisfaction and employee outcomes: mediating and moderating roles of work motivation," *The International Journal of Human Resource Management*, vol. 17, no. 3, Sep. 2006, pp. 504–522.
- [23] S. Pandey, and M. S. Khan, "Performance appraisal as a change bringer – Issues and prospects," *Indian Journal of Applied Research*, vol. 5, no. 3, Mar. 2015, pp. 244–246.
- [24] R. S. Ayers, "Building goal alignment in federal agencies' performance appraisal programs," *Public Personnel Management*, vol. 42, no. 4, Dec. 2013, pp. 495–520.
- [25] O. J. Ayanda, and A. D. Sani, "Strategic human resource management and organizational performance in the Nigerian manufacturing sector: An empirical investigation," *International Journal of Business and Management*, vol. 6, no. 9, Sep. 2011, pp. 46–56.
- [26] M. Brown, and J. S. Heywood, "Performance appraisal systems: Determinants and change," *British Journal of Industrial Relations*, vol. 43, no. 4, Dec. 2005, pp. 659–679.
- [27] S. S. Culbertson, J. B. Henning, and S. C. Payne, "Performance appraisal satisfaction: The role of feedback and goal orientation," *Journal of Personnel Psychology*, vol. 12, no. 4, 2013, pp. 189–195.
- [28] S. Mahajan, and S. Raheja, "Examine relationship between employees satisfaction on performance appraisal system with fairness of the system," *Asian Journal Management*, vol. 5, no. 1, Jan-Mar. 2014, pp. 49–54.
- [29] S. R. Moulik, and S. Mazumdar, "Exploring the relationship between perceived uses of appraisals and performance appraisal satisfaction in the Indian IT sector: An empirical study," *International Journal of Business and Social Research*, vol. 2, no. 5, 2012, pp. 63–76.
- [30] S. Yang, "A study on impact factors of staff performance appraisal in state-owned enterprise," unpublished master's thesis, National Chung Hsing University, Taichung, 2008.
- [31] H. Lin, "A study of the relationship among paternalistic leadership, performance appraisal and leadership effectiveness: A case in air force institute of technology," unpublished master's thesis, I-Shou University, Kaohsiung, 2008.
- [32] S. Shih, "Evaluation of performance appraisal system--A case study of a small- medium enterprise," unpublished master's thesis, Chung Yuan Christian University, Taoyuan, 2006.
- [33] G. K. Karyeija, "The impact of culture on performance appraisal reforms in Africa: The case of Uganda's civil service," *Canadian Center of Science and Education*, vol. 8, no. 4, Apr. 2012, pp. 159–174.
- [34] W. H. Macey, and B. Schneider, "The meaning of employee engagement," *Industrial and Organizational Psychology*, vol. 1, no. 1, Mar. 2008, pp. 3–30.
- [35] W. Lin, "The relationship among supervisor support, employee job engagement and job performance: A multi-level analysis model," unpublished master's thesis, Fu Jen Catholic University, New Taipei City, 2014.
- [36] T. J. Kamalanabhan, L. Prakash Sai, and D. Mayuri, "Employee engagement and job satisfaction in the information technology industry," *Psychological Reports*, vol. 105, no. 3, Dec. 2009, pp. 759–770.
- [37] K. Nowack, "Employee engagement, job satisfaction, retention and stress," retrieved from: [www.envisionlearning.com](http://www.envisionlearning.com), accessed during Apr. 2014.
- [38] A. Orgambidez-Ramos, Y. Borrego-Ales, and I. Mendoza-Sierra, "Role stress and work engagement as antecedents of job satisfaction in Spanish workers," *Journal of Industrial Engineering and Management*, vol. 7, no. 1, 2014, pp. 360–372.
- [39] M. Desai, B. Majumdar, and G. P. Prabhu, "A study on employee engagement in two Indian businesses," *Asian Journal of Management Research*, vol. 1, no. 1, 2010, pp. 81–97.
- [40] D. Ilham, "The other type of employee engagement: Can engagement happen toward organization as well," unpublished master's thesis, Asia University, Taichung, 2012.
- [41] C. P. Cheng, "The effect of organizational climate and job satisfaction on employee engagement- Case study of a rubber manufacturing company," unpublished master's thesis, Ching Yun University, Taoyuan, 2012.
- [42] D. R. Gomes, "Organizational change and job satisfaction: The mediating role of organizational commitment," *Exedra Journals*, vol. 1, 2009, pp. 177–195.
- [43] S. Shiao, "A study of the relationships among organizational culture, organizational change, job satisfaction, and organizational commitment," unpublished master's thesis, Dayah University, Changhua, 2012.
- [44] M. Huang, "A study of the relationship model among organizational change recognition, work attitudes, and job performance - The case of Taiwan Sugar Company," unpublished master's thesis, Chang Jung Christian University, Tainan, 2006.
- [45] R. Vignaswaran, "The relationship between performance appraisal satisfaction and employee outcomes: a study conducted in Peninsular Malaysia," unpublished master's thesis, University of Malaya, Malaysia, 2008.
- [46] C. M. Vance, and Y. Paik, *Managing a Global Workforce: Challenges and Opportunities in International Human Resource management*. NY: Routledge, 2015, p. 337.