

**The Impact of Organization Development Interventions (ODI) on Employee Engagement through the improvement of Job Resources:
A case study in a private Floor Tile Manufacturing company in Thailand**

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Abstract

This research studies the impact of ODI on Employee Engagement through the improvement of Job Resources (Supervisor Support, Job Autonomy, Performance Feedback, and Co-worker Support). For business to gain competitive advantage, the focus on new technology or good strategy must also include the human capital. The support and commitment of people is imperative in successful organizations. Thus, building an engaged workforce can be one of the strategic initiatives for a company to sustain organizational success. Using Action Research, this study was conducted at a local floor tile manufacturing factory. Six interventions were conducted with 27 participants over six months (May-Nov 2013). The ODI process design was based on Cummings & Worley's Effective Change Management and Tayko's Whole Brain Literacy. The researcher also set up a Control Group of 26 other participants who received no intervention. The results showed that (1) Age, Length of service in the Company, and Job Position did not have effect on level of Employee Engagement; (2) Job Resources and Employee Engagement were significantly increased after ODI; and (3) Job Resources had a statistically significant relationship with Employee Engagement.

Keywords: *employee engagement, work engagement, job resources, supervisor support, job autonomy, performance feedback, co-worker support*

Introduction

For business to survive in this fast moving competitive world, it needs to be able to respond to economic change, customers' behavior and globalization. The quicker the company can adjust to a changing economic environment, the better it can stay competitive. Each organization is different, what makes one better than the others? Products, Technologies or even strategies can be copied over time. One thing that is very hard to copy and is a key success factor is people. It is up to the company to find ways to bring out the best out of their people through Employee Engagement. Many studies support that engagement affects customer satisfaction, employee intention, productivity, creativity leading to increased bottom line (Bates, 2004; Corporate Leadership Council, 2004; Gibbons, 2006; Harter, Schmidt & Hayes, 2002; Schaufeli, Salanova, González-Romá & Bakker, 2002). Disengaged employees can cost companies' reputation and the financial outcome. From the Gallup study in 2007, disengaged workers have cost the US

economic around 334-431 Billion USD due to low productivity (Gallup, 2007). Low engagement can come from high job demands and lack of Job Resources which hinder employees to perform effectively while providing Job Resources can help them achieve their personal and organizational goal (Chung & Angeline, 2010).

This research is a case study at a local floor tile manufacturing company, "Company X". It is a privately owned company and has been established in Thailand for more than 40 years. Company X has been the leader in the market for a long time. Now market situation has changed with new start-ups and products from China selling the same products at a lower price. The upcoming AEC's free flow of skilled labors could impact Company X by losing talented employees to more developed countries such as Singapore and Malaysia which offer higher compensation. With more than 40 years in the industry, the working culture in Company X is like a big family. Employees are satisfied with company and sometimes are too relax. Employees become complacent and unwilling to make necessary changes to meet new challenges. The Management is aware of this issue and wants employees to be more accountable, more active, and more ready for change in order to stay competitive. Employee Engagement is a key factor in this regard.

Review of Literature

The theoretical frameworks underlying this research were based on two main concepts: Job Resources and Employee Engagement.

Job Resources

In operational terms, Job Resources are the monetary and non-monetary resources provided by company. Various researches have been conducted research on the relationship between Job Resource and the success of an organization. According to Zaleznik (1996), the form of Job Resources that a company uses to satisfy its employees determines the degree of the success of the company. The author reiterated that organizational success could either directly or indirectly attributed to the Job Resources provided by the organization.

A survey conducted in different manufacturing companies in the US revealed that companies with a higher number of Job Resources enjoyed more success than the others (Lasher, 1971). The results showed that the companies with better Job Resources benefited from getting higher revenues and profits as opposed to the companies with poor Job Resources. According to Kruse (1993) companies which offer an intensive level of Job Resource allocation and analysis are invariably those that experience the greatest level of growth and profitability no matter the industry. His research was conducted in Pennsylvania which involved a sample of some of the biggest companies across all the industries. He discovered that the profit margin compared to the revenue and size of the firm also was interrelated to Job Resource allocation.

The Job Resource allocation does not directly influence the level of profits or returns rather it increases employee motivation which in turn directly influences the production towards growth and profitability of the company. According to Sirota, Mischkind, & Meltzer (2005), if two companies hire the same kind of employees, only

Job Resource allocation will make a difference since the better the resource allocation the higher the profits and growth of an organization.

Employee Engagement

Employee Engagement has become known as an organizational psychology concept. Many studies support the relationship of engagement and business outcomes (Harter et al, 2002; Schaufeli & Bakker, 2004; Salanova, Agut, & Peiro, 2005; Robertson-Smith & Markwick, 2009). The concept of Work Engagement or Employee Engagement has started with the study of Kahn 1990. While it has been more than twenty years, there is still no consistency in definition and measurement (Dicke et al., 2007; Kular et al., 2008; Simpson, 2009).

Engagement is harnessing the talents and competencies of the employees to match their work performance role. The effect is evidenced by the quality of the commitment and the way they express themselves cognitively, positively and emotionally in their role performance (Lee, 2002). This implies that employees who are engaged tend to be physically involved in their performance, emotionally connected, and cognitively alert to the organization while performing their work role (Kress, 2005). Work Engagement is “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption” (Schaufeli, et al., 2002). Employee Engagement has been vastly defined and discussed by practitioners and academicians but they have not reached a common ground (Simpson, 2009). In sum, engagement is mainly the combination of involvement, commitment, passion, enthusiasm, and dedication to work. Engaged employees possess “3H”, namely: (1) Hands – engaged employees put full effort and energies into their work; (2) Head – engaged employees focus on their work and have intention to complete them; (3) Heart – engaged employees are attached to their organizations and want to help their organizations succeed.

The researcher summarizes the concept of “Employee Engagement” in three levels. Figure 1 shows the three level of engagement.

- Level 1: employees feel positive and think positive about the company. They also speak positive about the company to others. They feel valued to be in the company, their hearts and minds are with the company
- Level 2: Not just a feeling; employees also perform their jobs and meet required objectives. They take full accountability of their jobs.
- Level 3: This is the highest level of engagement. Employees do not only feel good and perform their tasks, but they also put extra efforts and always find the best solutions for the company. They have a sense of ownership of the company. They put their hearts, hands, and heads to contribute to its success.

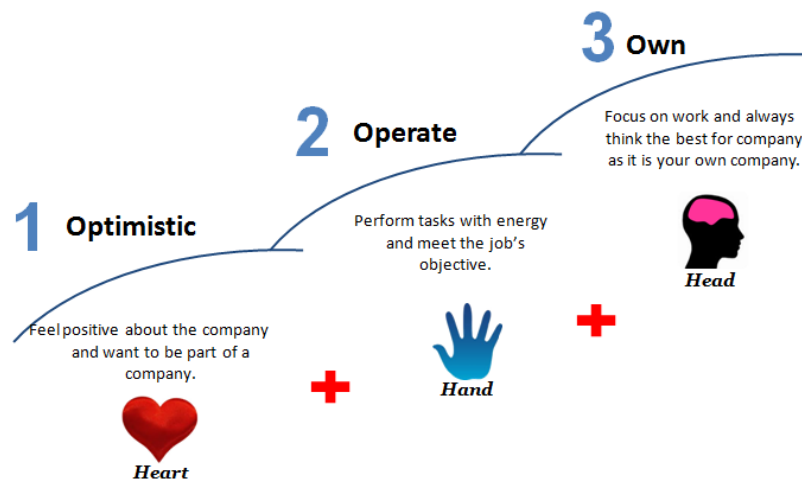


Figure1. Level of Employee Engagement (Source: the researcher)

Job Resources and Employee Engagement Link

This study applies Job Demand-Resources Model (JD-R model) as proposed by Evangelia Demerouti and Arnold Baker (Bakker, Demerouti, & Verbeke, 2004). Previous studies have shown that Job Resources (performance feedback, support from colleague, support from supervisor, learning opportunities are positively associated with engagement (Bakker & Demerouti, 2008; Schaufeli & Bakker, 2004; Rothmann & Jordaan, 2006; Halbesleben, 2010; Mauno, Kinnunen, Mäkikangas, & Feldt, 2010). In JD-R Model, there are two underlying psychological factors that play a crucial role in the development of job strain and motivation. First, there is the health impairment process whereby poorly designed jobs lead to employee exhaustion at the mental and physical levels which may lead to complications and serious health problems for the employees (Cherniss, 1980). Second, there is the motivation process whereby the Job Resources exert the motivating potential which in turn leads to a high work engagement and excellent performance (Farber, 1983). Figure 2 shows the JD-R Model.

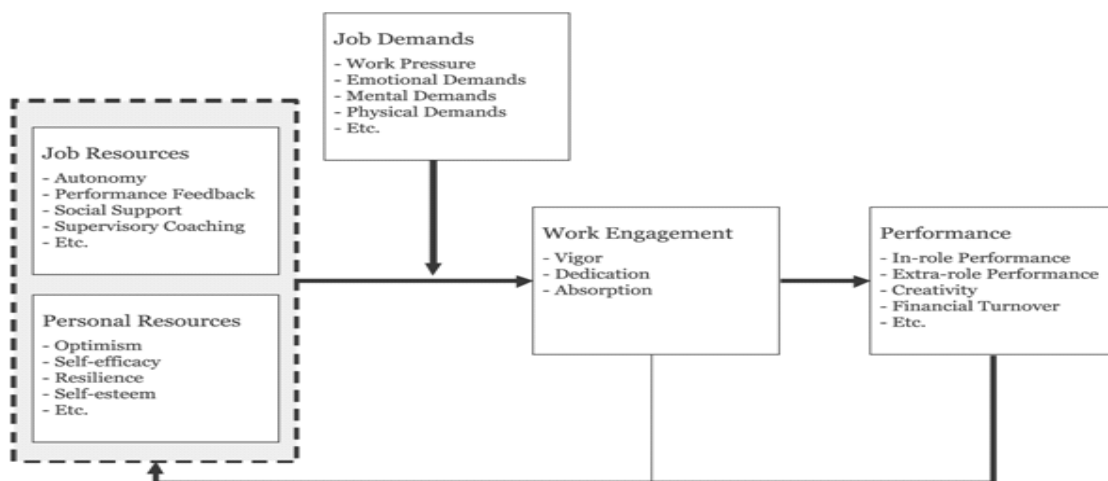


Figure 2. Job Demand-Resource Model: JD-R Model (Bakker & Demerouti, 2007)

Based on the JD-R model, Job Resources and Personal Resources can together or independently predict level of engagement (Bakker & Demerouti, 2008). The scope of this study focused only on Job Resources as Personal Resources, i.e. the employees' characteristics and individual sense, which are difficult to change in such a short period. The researcher selected three levels of Job resources to test in this study:

- Organization Level - Supervisory Support and Autonomy
- Interpersonal Level - Co-worker Support
- Task Level – Performance Feedback

Conceptual Framework

From the initial analysis of the focal company and the review of related literature, the increment of Job resources such as Supervisor Support, Job Autonomy, Performance Feedback, and Co-worker Support, may lead to an increase the level of Employee Engagement. The main theoretical framework applied in this study is the Job Resources and Employee Engagement. This research studies the impact of ODI on Employee Engagement through the improvement of Job Resources (Supervisor Support, Job Autonomy, Performance Feedback, and Co-worker Support) in a private Floor Tile Manufacturing company in Thailand. The conceptual framework is illustrated in Figure 3.

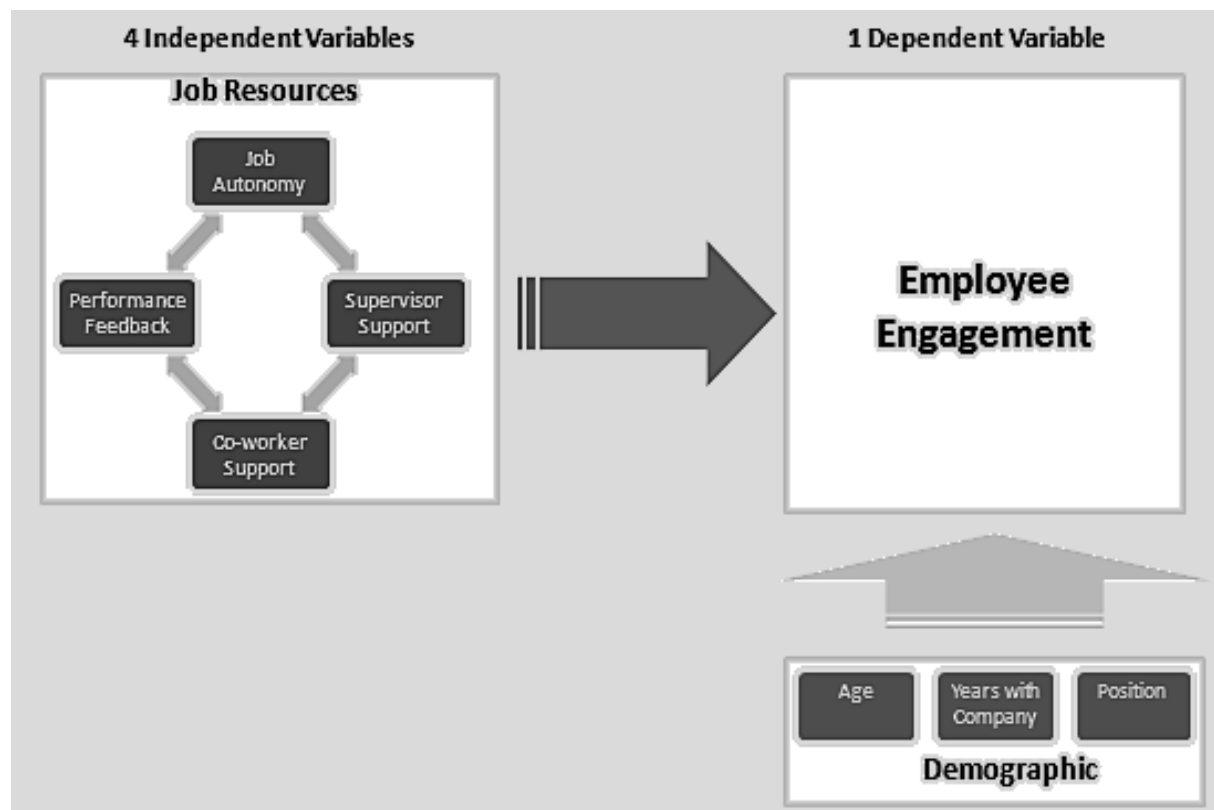


Figure 3. Conceptual Framework

The Job Resources (Supervisor Support, Job Autonomy, Performance Feedback, and Co-worker Support) are the independent variables while Employee Engagement is the dependent variable. The demographic data (age, length of service and job position) were tested with Employee Engagement to investigate whether there is any effect of demographics on Employee Engagement. Based on the conceptual framework the following hypotheses were tested:

Hypothesis 1: There is a different level of Employee Engagement with reference to ages, years with company and Position

Hypothesis 2: There is a significant improvement between Pre-ODI and Post-ODI on Job Resources (Supervisor Support, Job Autonomy, Performance Feedback, and Co-worker Support) and Employee Engagement

Hypothesis 3: Job Resources has a significant relationship with Employee Engagement

Methodology

Action Research was used as the research methodology with non-randomized Control and Experimental groups. Participants of both groups were selected by the HR manager of Company X. The selection criteria were a mix of departments to represent the whole company. This research utilized both qualitative and quantitative methods to analyze the data collected via questionnaires, interviews and observations. The researcher conducted six interventions over six months (May-November 2013). The interventions were conducted with 27 participants from various departments (Experimental Group). The researcher also set up a control group of 26 participants in order to compare the impact of interventions. The ODI process was designed based on Cummings & Worley's Effective Change Management and Tayko's Whole Brain Literacy.

- The Pre-ODI Stage began with a kick off meeting to explain the objectives, activities and timeline of the research. The researcher conducted one-on-one interviews with Company X's managers to understand the current Job Resources and Employee Engagement. The data were gathered by qualitative method (observations and interviews). The researcher also gathered quantitative data via questionnaires. The Job Resources and Employee Engagement questionnaire was distributed to both Control and Experimental Groups to answer how they felt about their current Job Resources and Employee Engagement.
- The ODI Stage involved the implementation of the interventions. These interventions were designed to improve Job Resources (Supervisor Support, Job autonomy, Performance Feedback, and Co-worker Support) and Employee Engagement. The whole intervention process took six months (June – November 2013). The main purpose of ODI was to develop the Job Resources in Company X; develop skills and competency of participants in leadership, team building, communication, problem solving, coaching ; and to develop and utilize the whole brain concept and thinking preference. Interventions were executed with the Experimental Group only. The Control Group did not receive any interventions.

- The Post-ODI Stage engaged managers in one- on -one interviews to understand the changes in Job Resources and Employee Engagement after interventions. Participants from both Control and Experimental groups were administered Job Resources and Employee Engagement questionnaires in order to compare between Pre and Post ODI situations. In addition, a comparison of five organization performance metrics (Absenteeism Rate, Employee turnover rate, Defect Rate, Customer complaints and Gross Profit Margin) for 2012 and 2013 was conducted.

Data Collection and Analysis Tools

Data gathering tools used to monitor the effects brought about by the interventions. All questionnaires were translated into Thai for better comprehension. The researcher conducted a pilot test with fifteen employees, randomly selected by HR manager. These fifteen employees were not part of the control nor of the experimental group. The researcher used Cronbach's alpha for reliability test and used three peer reviews for the content validity test. Cronbach's Alpha reported at 0.909 as Cronbach's Alpha was higher than 0.75, which renders the questionnaire as having a high reliability (Coolican, 2004).

The Job Resource and Employee Engagement questionnaire developed for this study included some representative items from several widely used instruments. Part I asked about name for a purpose of comparing between Pre and Post ODI dealt with the respondents' demographic data. Part II Job Resources, was divided into four subsections, namely: Supervisor (4 items are from Job Content Questionnaire (Karasek, 1985)); Job Autonomy (11 items are from the experience and assessment of work (Van Veldhoven and Meijman, 1994)); Performance feedback (3 items are adapted from "The measurement of Job Characteristics", (Sims, Szilagyi & Keller 1976)); Co-worker support (4 items are from Job Content Questionnaire (Karasek, 1985)). Part III Employee Engagement used the Bakker model which bases its measure of engagement on Utrecht work engagement scale (Schaufeli & Bakker, 2003).

Varied methods were utilized for data analysis, such as the following:

- Content analysis was used to investigate qualitative data from interviews, logbooks and training evaluation form.
- Arithmetic Mean and Standard Deviation were used to obtain respondents' average scores and variation or dispersion of scores.
- Percentage was used for demographic calculation
- ANOVA and Independent Samples T-test were used to determine the effects of the different demographic data to level of Employee Engagement.
- Paired t-test was used to compare pre and post ODI values for Job Resources (Supervisor Support, Job Autonomy, Performance Feedback, Co-worker Support) and Employee Engagement.
- Pearson Correlation was used to determine the relationship of Job Resources (Supervisor Support, Job Autonomy, Performance Feedback, Co-worker Support) to Employee Engagement.
- Percent improvement of Job Resources (Supervisor Support, Job Autonomy, Performance Feedback, Co-worker Support) and Employee

Engagement was used to compare the difference of Experimental and Control group at the post ODI stage.

Organizational Development Intervention (ODI) in the Focal Organization

The researcher used the Effective Change Management Framework of Cummings and Worley (Cummings & Worley, 2009, p.164) and Whole Brain Literacy (Tayko & Reyes-Talmo, 2010) in designing the OD process and interventions. The interventions consisted of a series of training and workshops from 31 May to 8 Nov 2013. At the end of each workshop/training, the researcher asked the participants to fill-up the training evaluation forms and their reflection log books. The training evaluation was used to evaluate whether the training/workshops met the objectives and how they apply the learnings to their work. The reflection log books were utilized to jot down their reflections on their learning and how they could apply these in real life together with their action plan. Figure 4 shows the summary of OD interventions.

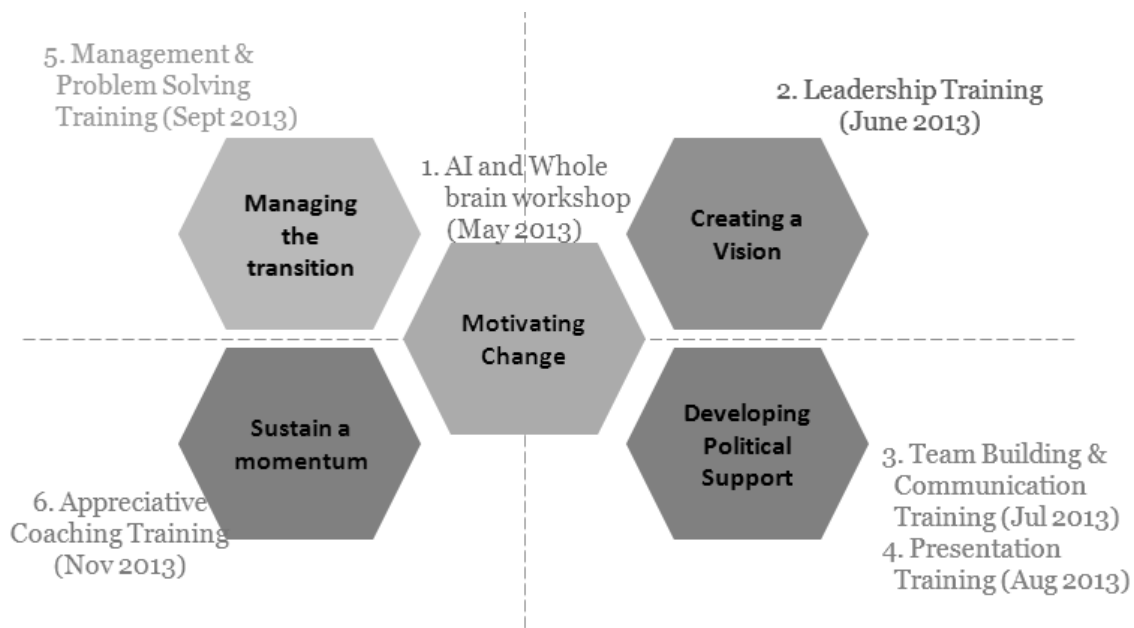


Figure 4. Summary of OD interventions in each step of effective change management framework

Step 1 – Motivating Change

In Motivating change, the researcher used Appreciative Inquiry Workshop and Whole Brain exercise to create the readiness for change and reduce resistance to change. The researcher conducted a one-day workshop. The objectives of the workshop were Understand Change Management, thinking process by using whole brain and Appreciative Inquiry. After the inputs on the topics of the seminar, the researcher divided participants into four groups and conducted an exercise on four variables of Job Resources to drive Company X Employee Engagement by using four quadrants concept

of WBL (I-control, I-explore, I-Pursue, I-preserve). The researcher used the AI Workshop with the affirmative topic: “Awesome Company X”.

In addition, the BrainMap Assessment Tool was conducted with the management team (Sales, Finance, Operation and HR) to analyze the thinking process and overall company functioning.

Step 2 – Creating a Vision

Creating a vision means to envision the future and provide members with a common goal so that the members understand the desired future and has a clear picture of what the new stage will look like. The researcher conducted a Leadership Training in order to use the right leadership style in each situation and bring the team to achieve their goals. This training session guided them to understand their roles and responsibilities as leaders, how leaders differed from managers; and how to become good leaders.

Step 3 – Developing Political Support

Developing Political support means managing the key stakeholders by identifying key stakeholders and assessing their power and influence. The researcher conducted two interventions at this step, namely: Team Work and Communication, and Presentation techniques. In the trainings, the researcher started the session with DISC exercise that emphasized that the need to know one self and how to interact with other types. On team work, the researcher trained participants on the characteristics of an efficient team, on conflict management, and on task delegation by using RACI. The last topic was on communication and presentation skills.

Step 4 – Managing the transition

This step is about ensured the smooth transition towards the desire state. This step included activity planning, identifying tasks, and setting up support structure. The researcher conducted a Management and Problem Solving training. This training aimed at honing skills on managing work, problem solving and analytical thinking. The training used group exercises with real problems in Company X such as Recruiting and Quality issues.

Step 5 – Sustaining the momentum

At this step, the organization must ensure that the change will be sustained by integrating them into the business.. The researcher used Appreciative Coaching as the intervention in this step. Effective coaching will help sustain the change as it will bring the best of people and generate new leaders from time to time. Company X never had the coaching culture. The best coaching they had was only focus on teaching technical skills on the job which did not include motivation, inspiration or groom staff.

Results

The results indicate that the ODI had a significant impact on Job Resources and Employee Engagement as evidenced by the results from the quantitative and qualitative data. After the ODI, all the mean scores of Job Resources (Supervisor Support, Job Autonomy, Performance Feedback and Co-worker Support) and Employee Engagement were significantly increased in Experimental Group; while in the control group only Job Autonomy score was significantly increased and the others had similar score or less than the Pre-ODI.

Hypothesis 1: There is a different level of Employee Engagement with reference to ages, years with company and Position

The researcher used quantitative data analysis from the experimental group at Pre-ODI to test Hypothesis 1. Table 1 and Table 2 show the mean scores for Employee Engagement by different age group and years with company.

Table 1. Employee Engagement by Age

Age Group	N	Mean	Std. Deviation
21-30	4	3.72058	.78829
31-35	5	4.82353	.30281
36-40	6	4.36275	.81967
41-45	6	4.04902	.77631
46-50	4	3.79412	.41176
51+	2	4.26471	.45754
Total	27	4.19172	.71107

Table 2. Employee Engagement by Years with Company

Years with Company	N	Mean	Std. Deviation
0-2	5	3.91765	.81253
3-5	3	4.39216	.39167
6-10	7	4.02521	.66625
11-15	3	4.56863	.68178
15+	9	4.28105	.82289
Total	27	4.19172	.71107

A one-way ANOVA was conducted to compare the effect of age and years with company on Employee Engagement. Table 3, an Analysis of Variance showed that the effect of Age on Employee Engagement **were not statistically significant**, at the $p < .05$ level [$F(19,7) = .594, p = .827$]. This result suggests that Age do not have an effect on Employee Engagement.

Table 4, an Analysis of Variance showed that the effect of Years with Company on Employee Engagement **were not statistically significant**, at the $p < .05$ level [$F(19,7) = .634, p = .798$]. This result suggests that Years with company do not have an effect on Employee Engagement.

Table 3. Analysis of Variance (Age)

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Age	Between Groups	36.519	19	1.922	.594	.827
	Within Groups	22.667	7	3.238		
	Total	59.185	26			

Table 4. Analysis of Variance (Years with Company)

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Yeas with Company	Between Groups	37.713	19	1.985	.634	.798
	Within Groups	21.917	7	3.131		
	Total	59.630	26			

An independent samples t-test was conducted to compare Employee Engagement in Supervisor and Staff positions. Table 5, an Independent Samples T-test showed that there **was a not a significant difference** in the scores for Supervisor (M= 4.34314, SD=.73421) and Staff level (M= 4.07059, SD=.69288); $t(25) = .9893$, $p = .332$. This result suggests that Positions do not have an effect on Employee Engagement.

Table 5. Independent Samples T-test

	N	Mean	SD	t	df	Sig. (2-tailed)
Supervisor	12	4.34314	.73421	0.9893	25	0.332
Staff	15	4.07059	.69288			

Hence, the statistically results **reject Hypothesis 1** that there is no difference level of Employee Engagement with reference to Age, Years with company and Position.

Hypothesis 2: There is a significant improvement between Pre-ODI and Post-ODI on Job Resources (Supervisor Support, Job Autonomy, Performance Feedback, and Co-worker Support) and Employee Engagement

The researcher used quantitative data analysis from the Experimental Group and the Control Group to validate the impact of ODI during Pre and Post ODI stages to test Hypothesis 2. Table 6 indicates that all variables of Job Resources (Supervisor Support, Job Autonomy, Performance Feedback, and Co-worker Support) have statistically significant increased after ODI for the Experimental Group.

Table 6. Comparison between Pre and Post ODI for each variable of Job Resources

Experimental Group					
Variables	Pre-ODI	Post-ODI	Paired Differences	Variance	Incremental Rate (%)
Supervisor Support	Mean 2.8519 SD .60946	Mean 3.2407 SD .49750	t = -2.657 Sig. = .013*	-0.3889	13.64%
Job Autonomy	Mean 2.6970 SD .52406	Mean 2.9529 SD .47464	t = -2.768 Sig. = .010**	-0.2559	9.49%
Performance Feedback	Mean 2.9259 SD .46532	Mean 3.1852 SD .47442	t = -3.155 Sig. = .004**	-0.2593	8.86%
Co-worker Support	Mean 2.9537 SD .55486	Mean 3.2315 SD .48001	t = -3.126 Sig. = 0.004**	-0.2778	9.41%
Control Group					
Variables	Pre-ODI	Post-ODI	Paired Differences	Variance	Incremental Rate (%)
Supervisor Support	Mean 3.1442 SD .41936	Mean 3.2115 SD .42245	t = -.727 Sig. = .474	-0.0673	2.14%
Job Autonomy	Mean 2.4476 SD .65198	Mean 2.6853 SD .62044	t = -2.271 Sig. = .032*	-0.2377	9.71%
Performance Feedback	Mean 3.1538 SD .31596	Mean 3.0769 SD .27175	t = .881 Sig. = .387	.0769	- 2.44%
Co-worker Support	Mean 3.1923 SD .45993	Mean 3.0385 SD .51329	t = 1.568 Sig. = 0.130	0.1538	-4.82%

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

The results **support Hypothesis 2** that there is a statistically significant improvement between Pre-ODI and Post-ODI on Job Resources. The qualitative analysis also support the results that as the supervisors focus more on soft skills and have better communication with the staff, then employees are more willing to participate and express their ideas. Communication and teamwork across departments are also better.

For the Control group, only Job Autonomy showed a statistically significant improvement. From the discussions with Company X's HR manager, the possible explanation for control group having a higher score in Job Autonomy might be that there were announcements from management to encourage employees to take accountability for their work and to propose ideas to make work more efficient. This might have some impact on the Control group resulting in a higher score after ODI.

Table 7. Comparison between Pre and Post ODI for Employee Engagement

Experimental Group					
Variable	Pre-ODI	Post-ODI	Paired Differences	Variance	Incremental Rate (%)
Employee Engagement	Mean 4.1917 SD .71107	Mean 4.4031 SD .70733	t = -2.782 Sig. = .010**	-0.2114	5.04%
Control Group					
Variable	Pre-ODI	Post-ODI	Paired Differences	Variance	Incremental Rate (%)
Employee Engagement	Mean 4.5113 SD .73711	Mean 4.1267 SD .85595	t = 2.938 Sig. = .007**	0.3846	-8.53%

** Correlation is significant at the 0.01 level (2-tailed).

Table 7 shows that in the Experimental Group there is a statistically significant improvement in the scores for the Pre-ODI (M=4.1917, SD=.71107) and the Post-ODI (M=4.4031, SD=.70733) for Employee Engagement; $t(26) = -2.782, p < .05$. The results suggest that ODI contributed to the improvement of Employee Engagement. As for the control group, there was a statistically significant decline in the scores for the Pre-ODI (M=4.5113, SD=.73711) and the Post-ODI (M=4.1267, SD=.85595) for Employee Engagement; $t(25) = 2.938, p < .05$. From observation and interviews with HR manager, the decline in the score might be attributed to the fact that employees in Control Group felt upset for not having been selected to be part of intervention group which gives them an opportunity to learn new things. Another explanation for the result might be that Employee Engagement level tends to go down if companies do nothing after a survey; this is supported by the study of Blessing White (2011) which revealed that those employees who participated in a survey and saw no action or follow up from the companies after the survey will be less engaged. This study suggested that surveying and not following up can actually result in decreasing the engagement.

The results **support Hypothesis 2** that there is a statistically significant improvement between Pre-ODI and Post-ODI on Employee Engagement.

Hypothesis 3: Job Resources has a significant relationship with Employee Engagement

The researcher used the quantitative data analysis from the Experimental Group at Post-ODI to test Hypothesis 3. Pearson Correlation was used to determine the degree of relationship between two sets of variables. Table 8 shows the summary of the relationships between Job Resources (Supervisor Support, Job Autonomy, Performance Feedback, and Co-worker Support) and Employee Engagement.

Table 8. Pearson Correlation between Job Resources and Employee Engagement

Variable (Job Resources)		Employee Engagement
Supervisor Support	Pearson Correlation	.567*
	Sig. (2-tailed)	.002
	N	27
Job Autonomy	Pearson Correlation	.575*
	Sig. (2-tailed)	.002
	N	27
Performance Feedback	Pearson Correlation	.702*
	Sig. (2-tailed)	.000
	N	27
Co-worker Support	Pearson Correlation	.586*
	Sig. (2-tailed)	.001
	N	27

* Correlation is significant at the 0.05 level (2-tailed).

The results indicate that all variables of Job Resources (Supervisor Support, Job Autonomy, Performance Feedback, and Co-worker Support) have statistically significant relationship with Employee Engagement. Job Resources; Supervisor Support ($r = .567, p < 0.05$), Job Autonomy ($r = .575, p < 0.05$), Performance Feedback ($r = .702, p < .05$) and Co-worker Support ($r = .586, p < .05$) have significant relationships with Employee Engagement. Performance Feedback had the most positive correlation to Employee engagement ($r = .702$).

Hence, the results **support Hypothesis 3** that Job Resources have a significant relationship with Employee Engagement.

In addition, the researcher conducted a comparison of five organizational metrics between 2012 and 2013. The researcher compared the accumulated results of June to November in year 2012 and 2013 which are ODI period. Absenteeism rate, Employee Turnover rate, Defect Rate and Customer Complaints were better during ODI. For Gross profit margin, the percentage in 2012 and 2013 is the same but if we exclude the unusual high sales in 2012 due to recovery of construction after flooding, the performance of gross profit in 2013 could consider better than 2012. Table 9 showed the comparison of Organizational performance. This research did not intend to conclude that there were direct impacts from the ODI programs. However, it was interesting to notice that results were better for ODI period.

Table 9. Comparison between 2012 and 2013 for Organization Performance

Metrics	2012 (Jun-Nov)	2013 (Jun-Nov)
Absenteeism Rate (%)	2.74	2.65
Employee Turnover Rate (%)	16.12	11.52
Defect Rate (%)	5.13	4.86
Gross Profit Margin (%)	28	28
# of Customer Complaints	3	2

Conclusions

The development of Job Resources (Supervisor Support, Job Autonomy, Performance Feedback, and Co-worker Support) has resulted in a positive impact on Employee Engagement. There was a positive correlation between each of the Job Resource variables (Supervisor Support, Job Autonomy, Performance Feedback, and Co-worker Support) and Employee Engagement.

The findings indicated that the improvement of Job Resources in organization can result to improved Employee Engagement. The results are supported by many previous studies that also found that Job Resources play a significant role in improving Employee Engagement (Bakker & Demerouti, 2008; Schaufeli & Bakker, 2004b; Rothmann & Jordaan, 2006; Halbesleben, 2010; Mauno, Kinnunen, Mäkikangas, & Feldt, 2010).

The research provided supportive evidences that Job Resources could be developed through ODI. The ODIs conducted in this research improved Job resource (Supervisor Support, Job Autonomy, Performance Feedback, and Co-worker Support) and Employee Engagement. There is a statistically significant improvement between Pre-ODI and Post-ODI for Job Resources (Supervisor Support, Job Autonomy, Performance Feedback, Co-worker Support) and Employee Engagement at 0.05 level of significance. The results are summarized as below.

- The ODI impact on Supervisor Support indicates that participants better understood the leadership style and how to apply the right style in particular situations. They realized that good leaders should focus on both task and people dimensions. This changed their mind sets to start caring more about staff. In addition, the Appreciative Coaching technique improved their skills in this area. Some participants started using the researcher's coaching form as a tool to communicate and feedback their employees.
- The impact of the ODI on Job Autonomy indicated that the participants better understood that the freedom of working can help generate more creativity and commitment from employees. This changed the mind-sets of supervisors to be more objective and supportive rather than directive.

- The impact of ODI on Performance Feedback suggested that Performance Appraisal is effective when it is more interactive, guiding and sets goals rather than a one-way communication where performance rating scores were read to employees. In addition, the participants learned how to give constructive feedbacks by using the appreciative approach.
- The impact of ODI on Co-worker Support indicated that the improvement of team work through enhanced communication skills and better understanding of the different styles of people. Participants learned their styles from the DISC personality assessment exercise (Dominance, Influence, Steadiness and Compliance) and realized how to better interact with others. After the ODI, the cross-functional team performance improved, especially those from the Sales and back office teams.
- The impact of ODI on Employee Engagement indicated a better collaboration among cross-functional teams, more participation in meetings, and more commitment to work, and better work quality. Participants were more involved and focused in their tasks. The appreciative inquiry concept has improved the working style. The improvement in Employee Engagement has a positive impact on organization effectiveness and working atmosphere in Company X.

In conclusion, the ODI program has successfully increased Job Resources in the organization. This development impacts an improvement of Employee Engagement and a coincident positive impact shown in better organization performance. Organization Performance (Absenteeism, Employee Turnover, Defect Rate, Customer complaints are Gross Profit) was better during ODI when compared with the same period in 2012. The improvement of organization performance in 2013 might not be a direct result of ODI but it is good to notice that the overall performance is better. The impact of Employee Engagement to Organization performance is supported by many literature reviews. (Zaleznik, 1996; Lasher, 1971; Hater et al., 2003; Schaufeli et al., 2002; Harter et al., 2002; Gibbons, 2006).

Recommendations

Recommendations for Company X

The research findings reveal that ODI had a positive impact on development of Job Resources and Employee Engagement and also had improved organization performance. This research focused only on a pilot group and it would be worthwhile to expand the scope to the whole organization for greater impact. The recommendations for Company X are summarized as below:

- 1) Roll out ODI to the rest of the organization
- 2) Utilize ODI such as coaching as part of company's human capital development program .

- 3) Integrate ODI into career development plan to sustain the continuous improvement

Recommendations for Further Research

Due to limited of time utilized in this study, a pilot group in organization was utilized to demonstrate impact of ODI in developing Job Resources and Employee Engagement. It would be beneficial to determine whether the design can be replicated in a larger group as well as in other industries.

For future studies, researchers may need to explore more dimensions of Job Resources such as growth opportunities, advancement, and Job security to prove whether the other dimensions of Job Resources that may have a positive impact to Employee Engagement. The design and hypothesis may also be tested with other types of organizations, such as large-size organization and non-profit organizations. Expanding the duration of research would be beneficial to test the ODI impact to other organization performance and business indicators.

Another limitation of this action research was that the findings of this research was derived from a single mid-size organization with non-randomized participants and based on only a short period of time. Hence, there is a limitation in generalizing the findings from this research. Therefore, a full quantitative research should be considered in order to gain a deeper understanding about the relationship between Job Resources and Employee Engagement.

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