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Linking Person-Job Fit To Employees' Retention: The Mediating Role of Work Engagement

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Abstract

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Retaining employees has become an important issue for the companies because retention helps the organizations to achieve their goals. This study intends to identify factors used to increase employees' retention. Specifically, this study examines the relationship between person-job (PJ) fit, work engagement (WE), and employees' retention. The study also determines the role of WE as a plausible mediating variable between PJ fit and employees' retention. The study was conducted among 268 engineers in semiconductor companies in Northern Region of Malaysia. The Structural Equation Modeling (SEM) was utilized and it found that PJ fit has positive inclination towards employees' retention and WE. The study also shows WE as positively affecting employees' retention serving as a mediator in the relationship between PJ fit and employees' retention.

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Keywords: Person-Environment Fit; Person-Job Fit; Work Engagement; Employees' Retention; Semiconductor Industry.

1. Introduction

The electric and electronic (E&E) industry was claimed to be the key industry that contributed significantly towards manufacturing export, employment, and investment in Malaysia (Brandt & Chuah, 2012; MIDA, 2011). Meanwhile, the semiconductor sector was the main E&E sub-sector, which accounted for 93.4% of the total export for electronic components or 50.8% of Malaysian total electronics export for 2011 (MIDA, 2012; Brandt & Chuah, 2012). In relation to that, excessive development efforts have been made by the Malaysian Government towards Penang's semiconductor



industry, particularly dealing with the issue of low cost production from Republic of China, India, Taiwan, Vietnam, and other Asian countries (MIDA, 2011; OECD, 2011). Due to this, the Malaysian Government initiated a number of actions in attracting new business opportunities, especially on upgrading Penang's semiconductor industry towards high value-added industries (MIDA, 2011; Bormann, Krishnan & Neuner, 2010) that required the semiconductor companies to move away from labour-intensive to more capital-intensive operations (MIDA, 2011; Bormann et al., 2010) which focus on advanced research, design, and development of new product and technology. This situation warrants a huge number of skilled employees, especially engineers who become the important person in conducting the above mentioned business activities (MIDA, 2011; Michael Page International Malaysia, 2012). However, the current issues of skilled shortages and phenomenon of migration among Malaysians (Michael Page International Malaysia, 2012; OECD, 2011; myStarjob, 2012) have disrupted the process of recruiting engineers for semiconductor companies in Penang. As claimed by Datuk Rosli Jaafar, The General Manager of the Penang Development Corporation (Chan, 2011), many skilled talents in Penang have moved away to the neighbouring country, such as Singapore that would subsequently affect the process of getting and retaining qualified engineers for semiconductor companies in Penang.

It is crucial to note that, the retention of employees may be attributed to factors which related to their work environment, in terms of match between employees and their work environment. In other words, engineers who perceive fit with their work environment may influence them to remain in the organization. In general, fit refers to a congruence or compatibility between an individual's attributes (e.g. skills, knowledge, abilities) (Jee & Kristof-Brown, 2012) and some environmental object (e.g. organization, work group, job) (Kristof, 1996). In other words, it involves the compatibility or congruence between individual abilities with their work environment, which specifically called as Person-environment (PE) fit. According to the fit theory, PE fit consists of five main dimensions, such as vocation, organization, job, group, and supervisor (Kristof, 1996). Out of these five dimensions, Person-job (PJ) fit is the main PE fit dimension that received greatly attention from researchers (Iplik, Kilic & Yalcin, 2011) and was claimed to influence many positive human behaviors.

Edwards (1991) had made an important contribution to the PJ fit literature as he conceptualized PJ fit as having two different conceptualizations, which were PJ demands-abilities (DA) fit and PJ needs-supplies (NS) fit. The PJ DA fit was specifically defined as the congruence of employees' KSAs with their job demand. This PJ DA fit explains that an individual should have specific KSAs that are required for a job implementation. With these KSAs, an individual will perform their job effectively. On the other hand, the PJ NS fit represents the employee's needs, and preferences that are met by the job performed (Edwards, 1991). It explains that the job performed by an individual will fulfill the individual's needs. However, most of PJ fit studies are concentrated on the benefits of PJ DA fit and it was extensively used to retain employees within an organization (Edwards, 1991). Low employees' retention, which represents high employees' turnover may weaken the business performance (Mustapha, Ahmad, Uli & Idris, 2010; Doh, Smith, Stumpf & Tymon Jr., 2011). Additionally, leaving employees also disrupt the company's work progress, as the company needs to take extra time to find replacements for them. It is reported that Malaysia faced a relatively long time to fill the professional

vacancies which takes an average of six weeks (myStarjob, 2012). Other than that, the process of finding replacements for leaving employees also involves negative financial impact to the organization which includes cost of recruiting, selecting, and training new employees.

In this paper, PJ fit was tested to influence employees' retention. Even though it is significant to study the influence of PJ DA fit on employees' retention, some researches have reported a moderate relationship and mixed findings on the relationship between DA fit and employees' retention (e.g. Mohamed, 2009; Greguras & Diefendorff, 2009). According to AbuKhalifeh & Mat Som (2013), employees' work engagement (WE), which was conceptualized as three main dimensions (vigor, dedication and absorption) was an important factor to enhance employees' retention. Specifically, this study tested the WE as mediating variable between PJ fit and employees' retention (refer Figure 1).

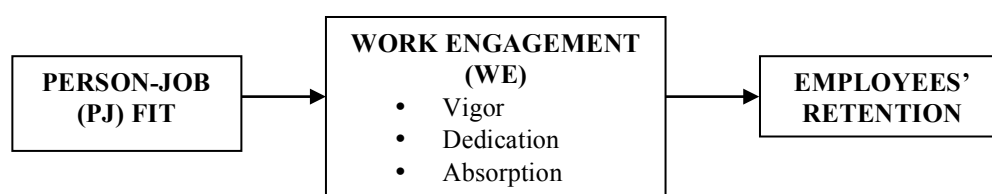


Fig.1.Research Framework

2. The Relationship Between Variables

2.1. The relationship between PJ fit and employees' retention

Greguras & Diefendorff (2009) and Mohamed (2009) did a study on the effects of PJ fit on employees' affective commitment that could be used in explaining the relationship between PJ fit and employees' retention. The results of the study revealed that PJ fit was positively correlated to affective commitment. Affective commitment is one of the organizational commitment dimensions that explained emotional attachment to the organization (Meyer & Allen, 1991). This explains that employees who are affectively committed are highly attached to an organization. Further, feeling of attachment may bond them with the organization and thus enhance their retention level.

Hypothesis 1: There is positive and significant relationship between PJ fit and employees' retention

2.2 The relationship between PJ Fit and WE

Saks & Gruman (2011) did a study on PJ fit and found that PJ fit had significantly influenced WE. They claimed that individuals who were sure about their job, through possessing KSAs in conducting their job, were more confident of their role and were likely to engage in work implementation. In addition, Manson & Carr (2011) also reported positive influence of PJ DA fit on work engagement. Employees with high PJ DA fit are those who are well equipped with specific KSAs needed by their job specification. They would feel easy to conduct their job and would perform their job effectively and successfully, which subsequently enhances their WE.

Hypothesis 2: There is positive and significant relationship between PJ fit and WE.

2.3 The relationship between WE and employees' retention

Vincent-Höper, Muser & Janneck (2012) claimed that there are positive connection between WE and several work outcomes. The most recent studies conducted by Karatepe (2013) and Agarwal, Datta, Blake-Beard & Bhargava (2012) as they found that WE negatively impacted employees' turnover intention. This finding explained that individual who are highly engaged in their work were less likely to leave the organization, which subsequently increased their retention level. Engaged employees are highly energetic, enthusiastic, and concentrated when conducting their job. They would feel happy and show greater interest that could influence them to continue performs their work, which further influenced them to remain longer in organization.

Hypothesis 3: There is positive and significant relationship between WE and employees' retention

2.4 The mediating effect of WE

In this paper, WE was claimed to be the mediator variable between PJ fit and employees' retention. This statement can be supported by various empirical researches (e.g. Agarwal et al., 2012; Karatepe, 2013; Vincent-Höper et al., 2012; Christian, Garza & Slaughter, 2011) which found that WE as being a mediator variable between two constructs. For instance, the one done by Karatepe (2013), as he focused on the mediating effect of WE on the relationship between perceptions of organizational politics and three job outcomes. The findings revealed a strong empirical support for WE as a full mediator variable between the variables. Besides that, studies by Agarwal et al. (2012), Vincent-Höper et al. (2012), and Christian et al. (2011) also supported the above findings, as they found that WE was significantly mediate the relationship between the antecedents and consequences of WE. In the context of this paper, WE could be used as the mediator variable between PJ fit and employees' retention.

Hypothesis 4: WE mediates the relationship between PJ fit and employees' retention.

3. Methodology

3.1. Sampling and research procedure

The disproportionate sampling was utilized, where 268 engineers in seven semiconductor companies in Northern Region of Malaysia were surveyed. The engineers in the semiconductor companies were selected since this group of employees was in high demand (investPenang, 2012). The high demand of engineers had influenced engineers' willingness to stay within their current organization, as they can move from one company to another depending on their skills demand.

The data collection procedure began with getting permission from the Human Resource Manager of every semiconductor company. Data were collected from seven semiconductor companies. The questionnaires were distributed to the engineers with the help from employee's representative in each company. This method was applied due to companies' regulation that disallowed outsider to personally enter the companies' plant of operation.

3.2 Measures

A questionnaire was administered that contained the three main variables mainly, PJ fit (independent variable), WE (mediator variable), and employees' retention (dependent variable). The respondents were asked to tap their preference response using 7-Point Likert Scale starting with 1-Strongly Disagree to 7-Strongly Agree.

PJ fit which was conceptualized as DA fit (employees with KSAs that fit with job demands) was measured using two sources. Firstly, the three items that captured the skills and abilities elements were taken from Lauver & Kristof-Brown (2001). This instrument had reliability value of 0.79. Secondly, this study utilized the instrument developed by Cable & DeRue (2002) in capturing the employees' knowledge element. The instrument by Cable & DeRue (2002) reported reliability result of 0.89.

WE instrument was taken from employee version of Utrecht WE Scale (UWES) developed by Schaufeli, Salanova, Gonzalez-Roma & Bakker (2002). It had 17 items that comprised three dimensions. The internal consistency (reliability) for these three WE dimensions were ranged from 0.68 to 0.88 for vigor, 0.71 to 0.96 for dedication, and 0.73 to 0.98.

Employees' retention was measured using five items developed by Mowday, Koberg & MacArthur (1984). This instrument had a reliability value between 0.90 and 0.94.

4. Data Analysis and Results

The data measures were confirmed for normality, linearity, and homoscedasticity (Tabachnick & Fidell, 2013). Next, the initial validity using exploratory factor analysis (EFA) and reliability were used to assess the psychometric properties of all measures. All three instruments showed Cronbach alphas of 0.829 (PJ fit), 0.923 (WE) and 0.694 (employees' retention). The data analysis continued with two steps approach recommended by Anderson & Gerbing (1988). The first step involved confirmatory factor analysis (CFA) to examine the measurement model of all variables. The standardized root mean residual (SRMR), root mean square error of approximation (RMSEA), Goodness of Fit Index (GFI), Comparative fit index (CFI) and Tucker-Lewis index (TLI), and chi-square/degree of freedom (χ^2/df) were observed. The results of CFA for PJ fit showed good model fit with the p-value= 0.296 ($p > 0.05$), GFI= 0.993 (GFI > 0.90), TLI= 0.996 (TLI > 0.90), CFI= 0.998 (CFI > 0.90), RMSEA= 0.029 (RMSEA < 0.08), and SRMR= 0.011 (SRMR < 0.10). Meanwhile, the goodness of fit (p-value= 0.065 (> 0.05), GFI= 0.953 (> 0.90), TLI= 0.969 (> 0.90), CFI= 0.978 (> 0.90), RMSEA= 0.055 (< 0.08), and SRMR= 0.042 (< 0.10) confirmed the significant model of WE measurement model. Lastly, employees' retention measurement model had achieved the recommended value of fit, as it achieved the goodness of fit of p-value= 0.084 (> 0.05), GFI= 0.993 (> 0.90), TLI= 0.965 (> 0.90), CFI= 0.993 (> 0.90), RMSEA= 0.074 (< 0.10), and SRMR= 0.055 (< 0.08). The standardized factor loadings ranged from 0.52 to 0.79 and were significant at $p < 0.05$. Therefore, convergent validity was established for all measures of this study.

The next step involved the process of hypotheses testing using SEM with a good overall fit to the model (CFI = 0.960 [> 0.90], TLI = 0.955 [> 0.90], RMSEA= 0.033 [< 0.08], and SRMR = 0.052 [< 0.1]). The standardized regression results presented in Table 1 found that PJ fit was positively correlated with employees' retention ($\beta = 0.340$, $t = 2.280$, $p < 0.05$). The results also confirmed the

positive correlation between PJ fit and WE ($\beta = 0.283$, $t = 2.647$, $p < 0.05$), and the relationship between WE and employees' retention ($\beta = 0.794$, $t = 2.232$, $p < 0.05$). This result supported Hypothesis H1, H2, and H3. These three results confirmed a significant path to test for the mediation effect of WE on the relationship between PJ fit and employees' retention.

To test the mediating effect of WE, the study utilized a fully mediated model comprises of three variables. It was found that the fully mediated model has a good model fit, as it achieved the goodness fit values of CFI= 0.960, TLI= 0.955, RMSEA= 0.033, and SRMR= 0.052. The model revealed that PJ fit had positive and significant influenced on WE ($\beta = 0.305$). PJ fit which influenced WE further influenced employees' retention ($\beta = 0.633$). These results showed that WE mediates the relationship between PJ fit and employees' retention. Based on these results, Hypothesis 4 was supported. Furthermore, this fitted model revealed that 35.1% of variance in employees' retention had been significantly explained by PJ fit that was mediated by WE. Figure 2 shows simplified model for the mediating effect of WE on the relationship between PJ fit and employees' retention.

Table 1. The standardized regression results for independent, mediator, and dependent

Hypo	From	Medi.	To	β -weight	t-value	Mediating Status	Result	Hypotheses Status
H1	PJ fit	-	ER	0.340	2.280	-	Significant	SUPPORTED
H2	PJ fit	-	WE	0.283	2.647	-	Significant	SUPPORTED
H3	WE	-	ER	0.794	2.232	-	Significant	SUPPORTED
H4	PJ fit	WE	-	0.305	2.606	MEDIATED	Significant	SUPPORTED
	-	WE	ER	0.633	2.245			

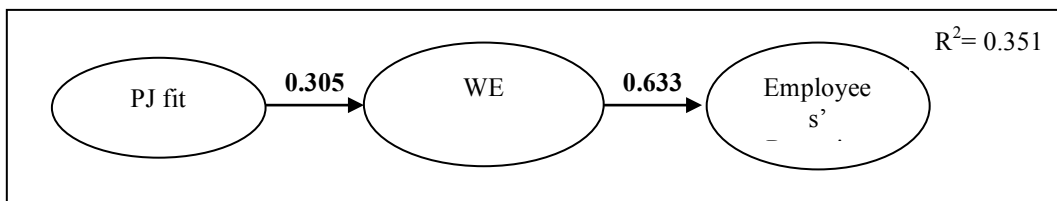


Fig.2. Simplified model for the mediating effect of WE on the relationship between PJ fit and employees' retention

5. Discussion

This study discovered that there is a positive significant relationship between PJ fit and employees' retention. Employees with adequate KSAs that are fitted with the demand of the job are highly skilled in conducting their job and they would experience less job stress but high job satisfaction while performing their job. As a result, it would motivate the employees to continue performing their job effectively and this could motivate them to stay in their organization. The study also confirmed the positive and significant relationship between PJ fit and WE. This means that engineers in semiconductor companies with high KSAs (PJ fit) are highly engaged in their job. This is because engineers with high KSAs that meet their job demands know their job better. They could apply their KSAs that meet their task implementation. In this situation, they could conduct their job effectively and efficiently, which ultimately motivated them to be engaged in their work. The results of the study also indicated a positive and significant relationship between WE and employees' retention. These findings suggested that engineers in the semiconductor companies who were engaged in their job were likely to

remain within their current organization. Research finding also revealed that WE served as mediating variable on the relationship between PJ fit and employees' retention. In this study, the engineers who had at least a Bachelor degree in any engineering discipline and had gone through formal education related to their job position as an engineer. With specific KSAs (gaining from formal education) that met their job's demands, it would help the engineers to implement their job effectively and successfully, which in turn motivated them to engage in their job implementation. They would also be positively rated and promoted with respect to their performance evaluation, and these would influence them to stay longer, thus increase employees' retention. Hence, this indicates that engineers with specific KSAs (gained during their studies) that match their job's (PJ fit) demand would be engaged in their work, and this would influence them to stay in the organization.

6. Conclusion

Based on the research findings and discussions of the results, it is proven that PJ fit is important predictor that influenced employees' WE and this would motivate them to remain in their organization. Related organization can use this given findings to develop comprehensive strategies to enhance employees' retention. For example, an effective training and development program should be conducted in a way to enhance the employees' KSAs and WE that subsequently promotes the employees' retention. Furthermore, the findings were also significant towards the recruitment process in the organization. Organization should select candidates who have specific KSAs that fit well to their job demands (PJ fit) and who are highly engaged in their work in order to have loyal employees. Future study recommended to conduct using different concept of fit, either with regard to supplementary fit or needs-supplies fit. In addition, future researches could also be conducted by combining different concepts in a single study. By doing so, future studies could provide a comparison between demands-abilities fit, needs-supplies fit, and supplementary fit. Other than that, it is suggested that future studies should apply other measurements of fit, i.e. objective fit or perceived fit in collecting fit data.

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