Employee Work Engagement: Understanding the Role of Job Characteristics and Employee Characteristics

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ABSTRACT

This study was aimed to examine the effects of perceived work design characteristics and employee characteristics on employee work engagement. Drawing upon the Extended Work Design Model, this study was intended to examine the effects of five dimensions of work design characteristics (autonomy, feedback, task significance, social support and physical demand) and two dimensions of employee characteristics (self efficacy and conscientiousness personality) on employee work engagement. The respondents of this study consists of 428 nurses working in two government hospitals in Malaysia. A hierarchical multiple regression results indicated a significant relationship between autonomy, feedback, task significance, social support and self efficacy with work engagement. Theoretical and practical implications, limitations of the study and the directions for future research were discussed.

KEYWORDS: Work Engagement, Job Characteristics, Autonomy, Feedback, Self Efficacy, Conscientiousness.

INTRODUCTION

Work engagement has become a subject of considerable discussion within organizations and interest to many researchers [1, 2, 3, 4, 5, 6]. Studies showed that work engagement is a key driver of employee attitudes, behaviour as well as performance of organizations, productivity and employee retention [7, 8]. Engaged employees are deemed important for work organizations in sustaining competitive advantage, keeping abreast with changes, and promoting work innovations. A review of past literatures on work engagement shows that work engagement has been studied in-depth by reseachers to determine its main antecedents as well as to identify its consequences. Past researches have identified a number of important predictors of work engagement such as job roles [9], task characteristics [10] and leadership [11].

There is also a considerable research evidence now that individuals' experience of their day-to-day work directly affects their engagement levels and also their personal effectiveness. [12, 13]. Although many past studies have explored the direct relationship between work characteristics and various work attitudes [14, 15, 16], the studies which examining the influencing role of both work design characteristics variables and employee characteristics in predicting work engagement of employees is scarce. This study was intended to investigate the direct effect of the motivational, social and job context characteristics together with two dimensions of employee characteristics on engagement of employees in their work place. Examining the influencing role of work design charactersitics on work engagement is expected to validate Expanded Work Design Model of [17], as well as to make an additional contribution in understanding work engagement antecedents. Since it is widely agreed that employee work engagement arises from both environmental and personal factors [18], it is imperative to also include personality factors in the study of work engagement. This will enable us to understand that environment alone is not solely responsible for determining the extent to which individual employees are engaged in their work, but personal factors also plays an important role that influence work engagement behaviours and contribute in shaping the work environment [19]. In line with this objective, this study has included two important personality variables namely self efficacy and conscientiousness in addition to the work design characteristics variables in predicting employee work engagement.

LITERATURE REVIEW

Work Engagement

A number of definitions have been provided in the academic literature for the construct of work engagement. In [20] defines personal engagement as "the harnessing of organization members selves to their work roles; in

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engagement, people employ and express themselves physically, cognitively, and emotionally during role performances." In [21] further emphasized that engagement means to be present psychologically when implementing an organizational role. Burnout researchers on the other hand defined engagement as the positive antithesis of burnout [22] and explained that engagement is characterized by energy, involvement, and efficacy, which are the direct opposite of the three burnout dimensions (exhaustion, cynicism, and inefficacy). In [23] defined engagement as "a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption". It further stated that engaged employees are more persistent and do not focused on any particular object, event, individual, or behaviour. Literature search shows that work engagement is said to be related to but different from other employee attitudinal constructs. In explaining the distinction between job involvement and job engagement, in [9] stated that job involvement is the result of a cognitive judgment about the need satisfying abilities of the job and is related to the employee's self-image and how other individuals employ themselves in the performance of their job. On the other hand, job engagement is said to involve the active use of emotions and behaviors in addition to cognitions.

Review of literature shows that there are two divisions of research that provide explanatory models of employee engagement. In [20] study on the psychological conditions of personal engagement and disengagement at work, revealed three important psychological conditions that is associated with employee engagement or disengagement at work namely meaningfulness, safety, and availability. In this study, workers were found to be more engaged at work in a work environment that gives them more psychological meaningfulness and psychological safety, and when they were more psychologically available. In [9] shows that meaningful work, safety and availability of resources significantly improve employee work engagement.

The other model of work engagement derived from the burnout literature which explained work engagement as the positive antithesis of burnout. Burnout here is explained as the erosion of engagement with one's task. The researchers identified six important areas of work-life that leads to burnout and engagement: workload, control, community and social support, rewards and recognition, perceived fairness, and value. Similar to burnout, engagement is expected to mediate the link between these six work-life factors and various work outcomes. Both [20, 22] models indicate the psychological conditions or antecedents that are necessary for work engagement.

The conditions of engagement in both of these models can be considered economic and socio emotional exchange resources within the Social Exchange Theory [24]. When workers receive these resources from their employers, they feel obliged to repay the organization with greater levels of engagement. In [20] definition of engagement, employees feel obliged to bring themselves more deeply into their role performances as repayment for the resources they receive from their organization. In the event the organization fails to prepare these resources (e.g. motivating job characteristics, social support, conducive work environment), employees are more likely to withdraw and become less engaged in their tasks.

Relationship between Work Design Characteristics and Work Engagement

Researchers agreed that enriching employees' tasks by creating a more challenging, motivating amd satisfying task will increase various work outcomes [25]. The theoretical basis for various enrichment effort of jobs is the job characteristics model [26, 27] which explained five motivating job dimensions that influences various organizational outcomes. These includes allowing employees to use different skills in doing their work (job variety), giving employees opportunity to complete the whole piece of (job identity), making employees to realize the significant impact of their job on others (job significance), giving some amount of freedom, independence, and discretion for the employees to plan their work pace and method (autonomy), and informing employees about their own job performance from the job itself, and through other sources such as their colleagues, supervisors or customers (feedback). According to the job characteristics model, these five core job dimensions are deemed to foster meaningfulness of the job, experienced responsibility for the job results, and awareness of the actual effects of the employees' work. These in turn is expected to create positive employee attitudes and work outcomes (e.g. internal work motivation and job satisfaction, productivity, work engagement and lower employee turnover).

In [17] extended the job characteristics model by integrating social and work context characteristics in their model due to the importance of these factors for a wide range of outcome. Construct such as interdependence, social support and interaction outside the organization is included as the social job characteristics, while physical demands, work condition and ergonomics has been included as the work context job characteristics. The researchers hypothesized that social characteristics of job and work context characteristics will explain unique variance in the behavioral and attitudinal outcomes, above and beyond motivational job characteristics. The findings also showed that the set of social characteristics explained a large amount of variance beyond the motivational characteristics for two behavioral outcomes; absenteeism and turnover intentions.

Multiple studies have examined the relationship between job characteristics and employee attitudinal outcomes such as job satisfaction, organizational commitment, and job involvement [14]. However, the studies that examining the direct relationship between work design characteristics variables propounded by [17] and work engagement is very scarce. One of the early studies on this relationship was conducted by [22] and which

demonstrated the importance of job characteristics for work engagement. In this study, the researchers found that feedback and autonomy consistently related positively to work engagement. On the other hand, in [28] who studied antecedents and consequences of employee engagement among 102 employees working in variety of jobs and organizations in Canada observed that job characteristics antecedents to be positively related to two dimensions of engagement (job engagement and organizational engagement). In a related vein, in [29] which used two large samples of Spanish and Dutch managers and employees reported job resources (job control, feedback and skill variety) are positively related to vigor and dedication dimensions of engagement. In another study, in [30] found that physical demand of job has a negative influence on exhaustion dimension of work engagement. In [31] study shows an additive effect of job characteristics (demands, control and support) on work engagement among a multi-occupational sample of working adults in South Africa. It demonstrated a curvilinear relationships between demands and work engagement, as well as between support and work engagement. A recent study by [10] revealed that work engagement was positively correlated with autonomy among 646 healthcare employees in Malaysia.

The theoretical explanation for the relationship between work design characteristics and work engagement can be referred to the Social Exchange Theory [24]. It stipulates that when both employer and employee abide by exchange rules, there will have a more trusting and loyal relationship. This is due to social exchange comprises actions contingent on the rewarding reactions of others, which over time provide for mutually and rewarding transactions and relationships [32]. Thus, employees who are provided with enriched, motivating and challenging jobs by the employer will feel obliged to respond with a higher level of attitudinal work outcome such as work engagement. In this study, it is expected that organizational interventions in the form of creating job with motivational, social and contextual job characteristics, will result in employees who are more engaged in their work. In contrast to the earlier studies, this study will be different as it examines three core motivational job characteristics dimensions (autonomy, feedback and task significance) together with a social job characteristic variable (social support) and one contextual job characteristics (physical demand) in order to explore their relationships with work engagement. In the health care service, social support plays an important role both to healthcare providers and healthcare receivers. In [33] found that social support have implications for nurses' physical and emotional well-being. It is reported that, if nurses are supported, they will experience less stress, less feeling of frustration and high morale and involvement in positive work behaviours. Whereas, contextual job characteristics such as physical job demand and psychological job demand is expected to decrease work engagement of nurses. With the inclusion of the social and contextual job characteristics, it is expected that the treatment of job design characteristics is more comprehensive and better able to statistically clarify the unique effect of each job design characteristics on work engagement.

On the basis of the above discussion on the theoretical and empirical researches related to this study, the researchers proposed the following.

Hypothesis 1: Work Design Characteristics (autonomy, feedback, task significance, social support, and physical demand) are significantly related to work engagement.

Sub Hypotheses:
H1a: There is a positive relationship between autonomy and work engagement
H1b: There is a positive relationship between feedback and work engagement
H1c: There is a positive relationship between significance and work engagement
H1d: There is a positive relationship between social support and work engagement
H1e: There is a negative relationship between physical demand and work engagement

Self Efficacy, Conscientiousness and Work Engagement
Since it is widely agreed that employee work engagement arises from both environmental and personal factors [18], it is imperative to include personality factors in the study of work engagement. Environment is not solely responsible for controlling or shaping the extent to which individuals are engaged in their work. Personal factors also function as reciprocal determinants of work engagement behaviours and contribute in shaping the environment [19]. In line with this argument, two types of employee characteristics variables namely self efficacy and conscientiousness are explored in the prediction of work engagement in this study.

Self efficacy concept which was emanated from the social cognitive theory [19] is refers to the extent to which individuals perceive themselves as capable of implemented the actions that are needed to fulfil some goals or perform some task effectively. Numerous studies have demonstrated self efficacy coincides with performance of individuals. For example, in [34] found that it relates with students academic performance. Self efficacy was found to be positively correlated with sales performance [35]. It also found to affect employee job attitude in a cross culture study between US and Southeast Asia [36]. In this study, it was found that general efficacy had a significant positive relationship with organizational commitment and a significant negative relationship with

intention to turnover. The relationship between general efficacy and organizational commitment was stronger in the U.S. than in the three combined countries sampled in Southeast Asia.

Organization behavior researchers agreed that the five-factor model of personality as one of the most important models in psychology that explains the salient features of personality. The big five personality dimensions are namely extraversion, agreeableness, conscientiousness, openness, and neuroticism [38]. The extraversion personality is referred to the positive emotions of employees and these employees has a tendency to be sociable, assertive, active, upbeat, cheerful, and optimistic. The employees with agreeableness personality has the tendency to be trusting, compliant, caring, considerate, generous, and gentle and these individuals have an optimistic view of humans, sympathetic to others and have a desire to help others and in return they expect others to be helpful. Conscientiousness individuals are very purposeful and determined employees who like to act dutifully, show self-discipline, and aim for achievement against a measure or outside expectation. On the other hand, neuroticism individuals found to have the tendency to experience fear, nervousness, sadness, tension, anger, and guilt are at high end of neuroticism while are emotionally stable and even-tempered at the low end of neuroticism. Finally, individiuals with the openness to experience are more tend to be imaginative, sensitive, original in their thoughts, attentive to inner feelings, appreciative of art, intellectually curious, and sensitive to beauty [37, 39]. In [40] investigated the relationship between all five traits and engagement. Extraversions were found to be a strong predictor of positive well-being [41] and neuroticism of negative well-being [42]. Compare to neurotic individuals, extraverted individuals are more likely to experience vigor, one of the core dimensions of work engagement [43]. On the other hand, in [44] found that only conscientiousness was significantly predicts work engagement. Finally, for the big five dimensions, emotional stability and conscientiousness were found to be the only two unique predictors of work engagement by [45].

On the basis of the above discussion on the theoretical and empirical researches related to this study, the researchers proposed the following.

Hypothesis 2: Employee characteristics (self efficacy and conscientiousness) are significantly related to work engagement.

Sub Hypotheses:
H2a: There is a positive relationship between self efficacy and work engagement
H2b: There is a positive relationship between conscientiousness and work engagement

METHODOLOGY

Sample and Data Collection
Respondents of this study consists of nursing and clinical employees working in two public hospitals in Malaysia and they were selected using a convenience sampling method. Permission to conduct the study was sought from the Hospital Directors and the Directors of Nursing Services of these respective hospitals prior to conducting this study. Data on employees' perceived work design characteristics, personality and their engagement in work were collected cross sectionally, using a structured research questionnaires.

A pilot study was conducted prior to distribute the study questionnaires to assess the appropriateness of the questionnaire design. Majority of the respondents agreed that most of the items were clear and understandable. Out of 800 questionnaires that were distributed, 520 questionnaire were returned with 92 cases of missing values, leaving a final research sample of 428 cases that can be used in the final analysis. Response rate in this study ranged from 51% to 61% with an overall response rate of 60% and overall non response rate of 40%. About 97.4% respondents were female and 2.6% were male. The imbalance in respondents gender in this study was due to the dominant female workforce in Malaysian government hospitals. The ethnic composition of the respondents of this study are as follows; 93.3% comprised of Malays, 3.9% comprised of Chinese, 2.3% comprised of Indians and the rest were from other ethnic groups. About 74% of the respondents were married, 19% were not married and 91% held higher school certificates and diploma qualification. The age range of the sample of participants was 23 to 58 years, with an average age of 36 years old (sd = 8.4). The mean organizational tenure was 8 years (sd = 7.1).

Measures
All constructs of the study was measured with scales adopted from existing scales.

Work Engagement
This study has adopted the 9-item questionnaire scales designed by [46] to measure work engagement. These items measures three main dimensions of work engagement namely vigor, dedication and absorption in their jobs. A sample item is "at my work, I feel bursting with energy". Participants indicated their response on a five

point Likert-type scale from 1 indicating strongly disagree to 5 indicating strongly agree. A coefficient alpha reliability of .88 has been reported for work engagement.

Job Autonomy, Feedback and Task Significance

This study has adopted the subscales of the Job Diagnostic Survey to measure job autonomy, feedback and task significance. This subscale consists of four items each that was evaluated by the respondents based upon a 5-point Likert-type scale indicating the extent or amount of each characteristics ranging from 1 (very little) to 5 (very much). An example of autonomy measure is "my job allows me to make a lot of decisions on my own". An example of feedback measure is "I often receive feedback from my supervisor and peers". An example of task significance measure is "I am holding a very important job in this organization". The respective coefficient alphas for autonomy, feedback and task significance in this study were .85, .86 and .76 respectively. These reported reliabilities are similar to the published reliabilities of the Job Desriptive Index (JDI) norms and other empirical research [26, 47]. In [48] reported coefficient alpha reliabilities of .63, .79 and .68 for autonomy, feedback and task significance respectively.

Social Support

Job Content Questionnaire (JCQ) scales was adopted in this study that comprises of six items measuring social support [49]. An example is "my co-workers are very helpful". Participants indicated their response on a five point Likert-type scale from 1 indicating strongly disagree to 5 indicating strongly agree. A coefficient alpha reliability of .51 was reported for this construct.

Physical Demand

Physical Demand scale with four items scale has been adopted [50] in this study. A sample item is "I have to work in an uncomfortable position". Participants indicated their response on a five point Likert-type scale from 1 indicating strongly disagree to 5 indicating strongly agree. A coefficient alpha reliability of .69 has been reported for this construct.

Self Efficacy

The generalized measure of self efficacy with 8 item scale has been adopted [51] in this study. A sample item is "I will be able to successfully overcome many challenges". Participants indicated their response on a five point Likert-type scale with anchors (1) very inaccurate to (5) very accurate. A coefficient alpha reliability of .90 has been reported for this construct.

Conscientiousness

This study has adopted ten item of conscientiousness from the International Personality Item Pool [52]. A sample item is "I pay attention to details". Participants indicated their response on a five point Likert-type scale with anchors (1) very inaccurate to (5) very accurate. A coefficient alpha reliability of .47 study has been reported in this study for this construct.

Covariates

Age and tenure of employees were investigated as covariates and potential confounders with reference to past researches [53, 36].

RESULTS AND ANALYSIS

The data collected was analyzed using Statistical Package for Social Sciences (SPSS) for Windows Version 20.0. A hierarchical multiple regression analysis was conducted to investigate the relationship between the work design characteristics variables, employee characteristics variables and work engagement. Data was screened for violations of the assumptions of normality, linearity, homocedasticity and multicollinearity [54] before conducting hierarchical multiple regression. The Pearson product-moment correlation coefficient was measured to investigate the bivariate relationship between all study variables. Table 1 shows the value of means, standard deviations, internal reliabilities and correlations among the study variables. The mean value for most of the study variables were above 3.5. The Pearson product-moment correlation analysis shows that most of the variables are strongly correlated with one another.

Table 1: Means, standard deviations, correlations and reliabilities of measures

Variables	M	SD	1	2	3	4	5	6	7
1.Autonomy	3.45	0.84	(.83)						
2.Feedback	3.91	0.66	.17**	(.86)					
3.Task Significance	4.10	0.58	.22**	.36**	(.76)				
4.Social Support	3.95	0.69	.20**	.48**	.20**	(.51)			
5.Physical Demand	2.72	0.85	.05	-.01	.11*	-.07	(.69)		
6.Conscientiousness	2.89	0.38	.07	.12*	.08	.12*	.21**	(.45)	
7.Self Efficacy	4.09	0.51	.27**	.26**	.34**	.24**	.08	.25**	(.90)
8.Work Engagement	4.06	0.54	.25**	.35**	.34**	.28**	.01	.13**	.47** (.88)

Notes: values in parentheses along the diagonal represent coefficient alphas, *p < 0.05; **p < 0.01

Effects of Work Design Characteristics and Personality on Work Engagement

Hypothesis 1 proposed that work design characteristics influences work engagement. Specifically, work design characteristics variables namely autonomy (hypothesis 1a), job feedback (hypothesis 1b), task significance (hypothesis 1c) and social support (hypothesis 1d) are hypothesized to be positively related to work engagement. Whereas, physical demand (hypothesis 1e) is hypothesized to be negatively related to work engagement. Hypothesis 2 proposed that employee characteristics influences work engagement. Specifically, self efficacy (hypothesis 2a) and employee conscientiousness (hypothesis 2b), were hypothesized to be positively related to work engagement.

A three step hierarchical multiple regressions was used to test hypothesis 1 and 2. To test these hypotheses, work engagement was entered as the dependent variable and two control variables (age and tenure) were entered in step 1 of the regression. These demographic variables were controlled as previous study shows the impact of these variables on work engagement [36, 53]. In step 2, the predictors (autonomy, feedback, task significance, social support and physical job demand) were added. In step 3, the personality predictors (self efficacy and conscientiousness) were added. Any significant increase in variance explained, as shown by R^2 in step 2 and 3, and the corresponding significance value for beta, would indicate the relationship between the predictors and the dependent variable.

Table 2 shows the result of the hierarchical multiple regression that tested the direct effect of the five dimensions of work design characteristics perceptions and two dimensions of employee characteristics on employee work engagement. Results of step 1 of the regression showed that between the two demographic control variables, only respondent age had a significant effect on work engagement. However, in total these demographic factors could only explain a very small variance (1.3%) in work engagement. When the five work design characteristics were entered in step 2, the total variance explained by the model as a whole was 23.2%, F (7, 405) = 17.487, p < 0.001. These five work design variables explained an additional 22.0% ($\Delta R^2 = 0.22$, p < 0.001) of the variance in work engagement, after controlling for age and tenure. Among the five dimensions of work design characteristics, four dimensions (autonomy, feedback, task significance and social support) significantly predicted work engagement whereas physical job demand did not significantly affect work engagement.

In step 3 when the two personality variables (self efficacy and conscientiousness) were entered, the total variance explained by the model as a whole was 32.5. %, F (9, 403) = 21.608, p < 0.001. These two personality variables explained an additional 9.3% ($\Delta R^2 = 0.093$, p < 0.001) of the variance in work engagement, after controlling for age, tenure and five work design variables. In this final model, self efficacy was found to be the strongest predictor of work engagement (b = 0.358, p < 0.001), followed by job feedback (b = 0.123, p < 0.01), followed by task significance (b = 0.124, p < 0.01), followed by social support (b = 0.080, p < 0.01) and followed by job autonomy (b = 0.055, p < 0.05). In this final model, physical job demand and conscientiousness did not significantly predict work engagement.

Table 2: Hierarchical regression results for effects of work design characteristics and employee characteristics on work engagement

Variable	Work Engagement		
	Step 1	Step 2	Step 3
Age	0.009**	0.012*	0.012*
Tenure	-0.015	-0.009	-0.009
Autonomy		0.095***	0.055**
Feedback		0.150***	0.123**
Task significance		0.200***	0.124**
Social support		0.111**	0.080*
Physical demand		-0.005	-0.019
Conscientiousness			-0.028
Self efficacy			0.358***
R²	0.013	0.232	0.325
Adjusted R²	0.008	0.219	0.310
F	2.612	17.487***	21.608***
ΔR²		0.220***	0.093***

N = 428; unstandardized coefficients are reported; *p < 0.05; two tailed **p < 0.01; two tailed; ***p < 0.001; two tailed; †p < .05, one tailed

In conclusion, this model indicates that work design characteristics variables accounted for about 22% of the variance in work engagement. Whereas, the personality variables (conscientiousness and self efficacy) are accounted for about 9% of variance in work engagement with a very minimal effect of the covariates age and tenure. In terms of the hypothesized direction of the relationships, autonomy, feedback, task significance, social support conscientiousness and self efficacy shows a positive relationship with work engagement as hypothesized. Physical job demand shows a negative relationship with work engagement as hypothesized. Based on the above finding, only sub hypothesis 1a, 1b, 1c, 1d, and 2a are fully supported. Therefore, both hypothesis 1 and hypothesis 2 were partially supported in this study.

DISCUSSION AND IMPLICATIONS

The main objective of this study was to examine the relationship between perceived work design characteristics and employee characteristics on employee work engagement. As hypothesized, the results showed support for the direct effect of work design characteristics (autonomy, feedback, task significance, and social support) and employee characteristics (self efficacy) on work engagement. This result shows that when the employer provide job with motivational and social job characteristics for their employees, employees reciprocated by becoming more engaged in their job. According to the job characteristics theory [26], when employers provide employees the freedom and the choice in carrying out their job, employees will be more motivated in doing their jobs and will be more willing to invest their effort in work related behaviour at work. The significant influence of employee self efficacy towards work engagement of employees in this study proved that job environment alone is not responsible for controlling or shaping the extent to which individuals are engaged in their work, but personal factors also function as reciprocal determinants of work engagement behaviours and contribute in shaping the environment. The findings of the significant positive effect of work design characteristics variables on work engagement are consistent with several research results [31, 10]. In [55] findings showed that task variety and task significance enhances work engagement of employees similar to the findings of this study. On the other hand, in [31] findings showed that autonomy enhances work engagement of employees similar to the findings of this study. The significant effect of feedback on work engagement in this study is consistent with study which found job feedback significantly predicted vigor and dedication dimensions of work engagement as in [29] study. The significant effect of social support on work engagement in this study is consistent with [16] empirical study that found social support enhances work engagement among 341 working adult in Malaysia. However, the findings of the study are contradicted with the findings of [55]. It showed that autonomy and feedback which were found to have little effect on employee engagement. The findings of the effect of self efficacy and conscientiousness variables on work engagement were found to be consistent and inconsistent with past research results. For example, the findings of the significant positive effect of self efficacy variable on work engagement are consistent with past research result of [56]. However, the finding of this study is found to contradict the finding of [55] which showed that conscientiousness significantly predicted employee engagement.

An important implication of this study is that employees' perception about work design characteristics and employee personality characteristics matters in the workplace, particularly with regard to promoting employee work engagement. This study has demonstrated that employees' positive perception on work design characteristics found to affect their job attitude, especially their engagement towards their work. Therefore, employers who wish to increase the level of work engagement of their employees need to work at providing these work characteristics in organization. As such management need to pay more attention to designing jobs and creating work environment with the strategy to increase work engagement of employees in organizations. Employers also need to ensure to recruit employees with higher self efficacy level in order to increase their engagement in the workplace.

Limitations and Suggestion for Future Research

Although this study has provided some important insights into the relationships among the work design characteristics, personality and work engagement, we acknowledge that there are also some limitations. First, the sample used in this study consists of rather a homogenous group of mostly female respondents (over 94%). Further, the respondents in this study are mainly registered staff nurses employed in the public hospitals in Malaysia. This has implications on generalizability of our research findings to employees in other sector of economy. Thus, future study should replicate our study using samples drawn from different occupations and type of work with even gender distribution. Second, the current study has employed a cross-sectional design in which data were collected from respondents at a single point in time. One of the weaknesses in this method is that it does not allow us to draw firm conclusion regarding the causal direction of the relationships among the predictors and outcome variables. Given this limitation, future research should examine the relationships among the variables using longitudinal designs that examine the continuity of the response. Finally, this study has focused on only selected work design characteristics variables in Expanded Work Design Model [17]. Future research can be extended by examining other potential work design characteristics such as job complexity,

interdependence or ergonomics work design variables in examining the relationship between work design characteristics and work engagement. Future study also could include other personality variables such as the other Big Five personality dimensions in the predicting work engagement.

CONCLUSION

This study has provided an empirical evidence for linking employees' perception of their job and their personality to the level of work engagement; thus providing support for a key theoretical proposition of job characteristics theory. This study found a strong support for the direct effect of work design characteristics and employee characteristics on work engagement of employees. This study found four work design characteristics (feedback, task significance, social support and autonomy) and one type of employee characteristics (self efficacy) which significantly predicted employee work engagement. Self efficacy was found to be the strongest predictor of work engagement, followed by job feedback, task significance, social support and job autonomy. This suggests that employers who provide motivating job characteristics to their employees who possess high self efficacy may increase the employees level of motivation at work. As an exchange to the motivating work, these employees may display positive work attitude such as work engagement which deemed important in enhancing the effectiveness of organizations.

ACKNOWLEDGEMENT

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