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A Study on the Relationship Between Job Design and Innovative Work Behavior

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Abstract: Job design is essential to reduce and overcome job dissatisfaction arising from repetitive tasks. Innovative work behavior is considered as one method in solving employee problem by crafting new idea. This study has been conducted because less studies on how job design could affect innovation in service sector had been conducted in Malaysia. Thus, this study attempts to identify the relationship between job design and Innovative Work Behavior (IWB). The objectives of this research are to determine the level of job design among employees in service sector, to determine the level of IWB among employees in service sector and to address the relationship between job design and IWB. Quantitative study had been used in this study. An online survey has been conducted among 234 employees in service sector in Ampang, Selangor with a response rate of 67.8%. Data were evaluated using descriptive analysis and Spearman's correlation analysis. This study found that the level of job design and innovative work behavior is moderate. Only skill variety, task significance and autonomy had a substantial relationship with innovative work behavior.

Keywords: Innovative Work Behavior (IWB), Job Design, Service Sector

1. Introduction

Innovation is about doing somewhat new and differently from others to operating in your space. Innovative work behaviour (IWB) is described as a set of individual actions (e.g., exploration, creation, advocacy, and execution of innovative ideas) that encourage job-level innovation and may be considerably aided by job design (De Spiegelaere et al., 2012a). A significant individual-level predictor of a myriad of positive job outcomes. Employee creativity in these firms is heavily influenced by innovative work habits. Thus, many professionals career seek to stimulate innovative behaviours from a broad category of employees.

Job design is involving the process of job organization. It seeks to lessen and eliminate job unhappiness and employee isolation caused by repetitive and mechanical duties (Rajguru, 2019).

However, organizations rely on their workers to accept greater responsibility for transition and to anticipate potential changes in a timely manner (Giebels *et al.*, 2016)

In Malaysia, service sector plays an important role in an economy that increases simultaneously with the level of economic development. The services sector ranging from informal activities to highly specialized, knowledge and intensive such as information and communication technology. Not only that, services sector also determining the competitiveness of firms in all sectors of the economy, namely agriculture, manufacturing, mining and the service sector itself. Hence, the services sector has appeared as the main sector in the economy, both in terms of its role to the gross domestic product (GDP) and employment. Department of Statistic Malaysia reported that RM335.6 billion of total revenue in second quarter 2020 was contributed by services sector. However, this performance decline 24.0 percent in comparison to the same quarter 2019. According to Malaysian Investment Development Authority ,MIDA (2019), Malaysia is moving more towards the expansion of the services sector to serve as a key growth engine to drive and sustain the economy.

In Asia, Malaysia had been ranked eighth on the innovation index and reported 33rd in the Global Innovation Index (GII) 2020 as stated by the World Intellectual Property Organisation (WIPO). This shows that Malaysia's level of innovation is still low when compared to other developed countries such as Tokyo and Singapore. Although service sector is among the central sector and had the potential for its role in the innovation-driven economy as projected by the New Economic Model. Innovation in the service sector has not received much attention in Malaysia. Since the service sector is a major contributor to the economy, understanding the need for innovation in the service sector is becoming more important for growth of the economy.

Most of the company faced the challenge of creating a good job design where workers can develop and harness their innovative potential. However, the influence of job design towards work outcomes may differ due to individual differences (Zacher *et al.*, 2017). Previous study conducted by De Spiegelaere *et al.* (2012b) found that job design has an influence on innovative work behavior. However, Hammond *et al.*, (2011) found inconsistent finding on the association between job design and innovative work behavior of the worker. Driven by this gap, this study was undertaken with the aim of determining the relationship between job design and innovative work behavior.

Therefore, to achieve the research objectives the level of job design among employees in service sector and the level of innovative work behavior among employees in service sector are measured. Consequently, the relationship between job design and innovative work behavior among employees in service sector is identified.

This study focuses on the relationship between job design and innovative work behavior. This study had been conducted on employees in the fast-food services sector companies in Ampang, Selangor.

This study will not only add value to the understanding of information about job design, but also covers its relationship with innovative work behavior. The finding of the study can help the organizations to plan an effective strategy that can manage the problem of the company. Service sector company will aware about the importance of job design and how it will influence IWB of the employees. Furthermore, this study also is expected to give a detailed information about the relationship between job design and innovative work behavior. The information of the study is not only can be used as a guide for services sector, but it is also can be used for the other sector such as manufacturing sector.

2. Literature Review

This section will discuss literature of job design, innovative work behavior and the relationship between job design and innovative work behavior.

2.1 Innovative Work Behavior (IWB)

Employees' innovative behaviour is defined as a self-initiated action that aims to enhance current situations or make new ones (Abstein & Spieth, 2014). Innovative work behavior is also defined as a complicated action that consists of the invention, implementation, or use of innovative appropriate ideas, procedures, and solutions (Prieto & Pérez-Santana, 2014). Individual characteristic, organizational characteristics and external characteristics were found have a related with IWB. This concept highlights the significance of employees finding, proposing, and executing relative unique work-related ideas, where creative behaviour produces certain form of advantage that affects the various levels of the business (De Jong & Den Hartog, 2010). Specifically, De Jong & Den Hartog, (2010) stated that innovative work behaviour varies from notions such as employee creativity in that it includes behaviour based on problem detection, idea advocacy, and idea execution as well as idea production

2.2 Theory of IWB

The innovative work behavior had three dimension namely idea generation, idea promotion and idea realization (De Jong & Den Hartog, 2010).

(a) Idea generation

The first dimension of innovative work behaviour is idea generation which relates to developing single concepts and processes for the aim of betterment, that might be reinforced by the incorporation of additional information, abilities, and information sources. Others describe creative work behaviour with idea generation as the invention of unique and beneficial ideas in either field or topic (Abstein & Spieth, 2014). Furthermore, during the idea creation stage, workers develop novel approaches to addressing the demand. According to De Jong and Den Hartog (2010), good generation are persons who could really approach an issue or accomplishment from a fresh perspective.

(b) Idea Promotion

The second dimension of individual of behaviour is idea promotion. In this stage, idea promotion is about a process promoting ideas to others to get support before the design are implemented. If a concept is produced, it is usually necessary to sell it. As a result, the concept is being promoted all across the organisation in order to gain support for future deployment. To properly market a concept, an imaginative worker must network and seek out friends, investors, and sponsors (De Jong & Den Hartog, 2010).

(c) Idea Realization

The final dimension of innovative work behaviour is idea realization. Idea promotion and concept realisation include the awareness of actual work behaviour, wherein workers advocate the created idea, that may then be implemented in the workplace (De Spiegelaere *et al.*, 2012b). As a result, this stage of innovative work behaviour reflects the completeness of the concept by transforming it into a practical application, either physically or cognitive, that may subsequently be conveyed to others. Furthermore, idea realization refers to the implementation of a new concept in the creation of a new item or procedure in an organization.

2.3 Job Design

Job design is long been regarded as a significant factor in a worker's intrinsic motivation and creative effectiveness at work. Worker activities, responsibilities, tasks necessary to execute their employment, and how certain tasks and obligations are structured and planned are all examples of job design (Morgeson & Humphrey, 2006; Parker & Ohly, 2010). Traditionally, job design focuses more on the job itself than in a particular individual who take on the task. However, many researchers found that job design has motivational consequences. Job design must begin with a study of job needs, or what can be performed, and afterwards incorporate the following motivational characteristics: autonomy, responsibility, decision, and, eventually, self-control (Belias & Sklikas, 2013).

Furthermore, job design is defined as "the definition of content, procedures, and employment relationships to suit technical and organizational demands and also job holders' professional and individual demands" (Morgeson & Humphrey, 2006). Among the factors that should be considered while designing a job, are as follows: optimizing the amount of specialization; minimizing the time necessary to complete the work; minimizing the level of ability necessary; minimizing study/training time; maximizing the usage of machines; and minimizing the level of flexibility in task execution.

2.4 Theory of Job Design

The Job Characteristics Theory (JCT) had been developed by Hackman and Oldham (1976). This model is extensively used as a framework to investigate how certain job characteristics influence job outcomes, including job satisfaction. There are four job characteristics approach to job design namely:

(a) Skill variety

According to Morgeson and Humphrey (2006), skill variety is the degree whereby a job demands individuals to do a variety of duties on the job is referred to as job characteristics. The definitions stressed that a significant level of ability variation is likely to foster better levels of enthusiasm and innovation than fairly basic and regular tasks. A data entry clerk's work, for instance, requires input to be input and corrected during the day and has a limited task diversity. A product manager's work involves a wide variety of tasks. This is due to the fact that this role encompasses the full product management cycle, including designing marketing techniques, executing implement strategy, and completing market and price analyses.

(b) Task identity

The task identity is the second job characteristic. It refers to the degree whereby a job involves a complete piece of labour, the consequences of which would be clearly identified, is referred to as task identity (Morgeson & Humphrey, 2006). Besides that, it involves provided the job as an overall solution and a recognizable job where, doing the job from start to finish with tangible results (Andrew *et al.*, 2016). This characteristic includes being able to recognize with the task at hand as being more holistic and comprehensive, and the overall task of strengthening the individual's sense of personal responsibility, accountability, and flexibility in work operations. Workers seem to be more effective in appraising themselves in terms of the value of work accomplished when task identity improves.

(c) Task significance

The third job characteristics approach to job design is task significance. The amount whereby a job has to have a substantial effects on the behaviour or occupations of everyone else, whether inside the business or in the external world, is referred to as task importance (Andrew *et al.*, 2016). However, the job characteristics model stipulates that employees can have higher significance if they believe their employment has a good influence on the well-being of others. Furthermore, if a workers believe that the duties are unneeded, it may result in low job value and meaning and engagement (Alabood & Manakkattil, 2020).

(d) Autonomy

According to Morgeson and Humphrey (2006), autonomy is the degree whereby a job gives flexibility, to plan task, involve in decision making, and pick the techniques utilised to complete tasks. Besides that, autonomy concerns whether employment gives employees the opportunity to decide when and how to perform a particular task. In other words, the flexibility and autonomy to influence the decision process of the organisation is provided by autonomy (Alabood & Manakkattil, 2020). Hence, this might give the employee the impression that their opinions are valued because the organisation takes them into account.

(e) Feedback

The last job characteristics approach to job design is feedback. Feedback is the degree whereby the job gives immediate and unambiguous data on the efficacy of task performance is characterised as feedback (Morgeson & Humphrey, 2006). As contrast to feedback from others, the emphasis is on better result from the job or understanding with one's own job actions. As a result, workers may enhance their performance response to feedback or information obtained from the task they do. Moreover, if employees receive enough feedback for continual growth, they can increase their job abilities. This is supposed to improve understanding of the job's outcomes (Andrew *et al.*, 2016). In other terms, feedback is the information received regarding the task. Employee performance feedback is vital since it lets you know whether or not they are performing well.

2.5 The Relationship between Job Design and IWB

Previous studies by Werleman (2016) found that employees who participate in IWBs have strong intrinsic motivation, which is the result of their beliefs of having richer job design. As a result, the job design could help to understanding the performance of the workforce, understanding of work results, and experiencing accountability for work performance. Furthermore, job design and associated job features may be viewed as contextual and motivational factors for IWB (Hernaus, 2016). Their impact on innovative work behaviour theory (concept creation, idea promotion, and idea realisation) was already documented. The impact of job features on creativity (i.e., skill variety, task identity, task significance, autonomy, and feedback) and discovered that a composite index of these job qualities had been an excellent predictor of innovative work behaviour.

IWB is conceptualized as a single construct predicted by the same level of job characteristics. It was discovered that difficult and challenging jobs (skill variety, task identity, task significance, autonomy, and feedback) significantly connected with creativity and innovation (Hernaus, 2016). Recent research indicates that by increasing the complexity, employment can be tailored to foster creativity and innovation in the organization. Interaction with people is a vital aspect of social work, not just for idea production as well as for putting new ideas into action (Hammond *et al.*, 2011). While adopting innovative solutions, staff must listen to the concerns of the consumer and be willing to adapt their 'playing toy' (i.e., innovation) to improve its market success. Last but not least, Hammond *et al.* (2011) recommended that jobs may one day be created to encourage creativity and innovation. These 'creative' and 'innovative' employment typically involve non-routine activities that are tough and complicated in nature, with a greater range of work activities. Thus, the following hypothesis are proposed.

H1: There is a relationship between skill variety and IWB.

H2: There is a relationship between task identity and IWB.

H3: There is a relationship between task significance and IWB.

H4: There is a relationship between autonomy and IWB.

H5: There is a relationship between feedback and IWB.

3. Research Methodology

Quantitative approach with online survey research method had been used in this study to determine the relationship between job design and IWB.

3.1 Research Design

This research had been carried out using quantitative research method as a research design. Therefore, in this study, the research design that has been chosen will provide a questionnaire as a tool for data collection regarding the topic which is the relationship between job design and IWB. After the scales have been chosen, an online questionnaire has been conducted for employees in fast food service to gather quantitative data.

3.2 Population and sampling

The target population for this study is the employees of fast-food services sector in Ampang, Selangor. This area has been chosen for this study because the area has a wide variety of fast-food brands such as KFC, McDonald's, Burger King, Marry Brown and etc. In this study, the total number of populations of this study are 635 employees. The convenience sampling method has been utilized in this study. Based on Krejcie and Morgan (1970), 234 employees had been selected to be a respondent in this study.

3.3 Instrument

The questionnaire of the study consists of three sections. Section A entails the background information of the respondents while, Section B consists of questions that related to the job design as proposed by Morgeson and Humphrey (2006). The questionnaire were assessed using five-point Likert scale ranged from "strongly disagree" to "strongly agree". Section C consist of questions that related to IWB and been measured using the ten-item scale of De Jong and Den Hartog (2010). This section were assessed using five-point Likert scale ranged from "never" to "always".

3.4 Data Collection

In this study, data collections are gathering all the data and information through the primary and secondary data.

(a) Primary data

In this study, the primary data had been used online survey research method as an instrument to gather information needed. The online survey is distributed to employees in fast food service in Ampang, Selangor.

(b) Secondary data

In this study, the sources of secondary data were obtained from previous research journals and article. It is used the method to obtain information from websites Tunku Tun Aminah Library which consists to many platforms of journals and articles such as Emerald, Science Direct, SpringerLink and so on.

3.5 Pilot study

In this study, a pilot test had been conducted before the actual data to assess the reliability test of research instrument. 15 employees had been involved in pilot to determine whether the instrument meet the requirement of content reliability and validity.

3.6 Data Analysis

The data had been analyzed SPSS version 20 using descriptive analysis and correlation analysis.

(a) Descriptive analysis

In this study, descriptive analysis had been used to describe the basic features of background information in section A of questionnaire. It also provided simple summaries about the sample and measures the available data through specific numbers such as mean, median etc. to facilitate understanding of the data. Besides that, this analysis also been used to determine the level of job design and the level of IWB.

(b) Correlation analysis

In this study, correlation analysis had been used to determine the relationship between job design and IWB among employees in services sector. In addition, Spearman's Rank had been used to measure of strength and direction of the relation between both variables.

4. Results and Discussion

3.3 Reliability Analysis

Table 1 shows the reliability test for the actual study for each variable. The result show that the Cronbach's Alpha for all variable is acceptable, good and excellent since the value of Cronbach's Alpha is more than 0.7. Hence, the actual study is reliable.

Variable Cronbach's Alpha N-Items in Scale Respondents Skill Variety 4 0.794 158 Task Identity 0.770 4 158 Task Significance 4 0.755 158 3 Autonomy 158 0.761 3 Feedback 0.848 158 Innovative Work Behavior 0.882 10 158

Table 1: Reliability test

3.4 Descriptive analysis

Table 2 shows the summary result for demographic analysis. Based on the table, there are five questions in demographic information which related to gender, age, level of education, monthly salary and the number of years working. There are five questions in demographic information which related to gender, age, level of education, monthly salary and the number of years working. Majority of respondent is female with 53.8 percent while male with 46.2 percent. Most of the respondents in this study fall at the age between 21-30 years old (33.5%) and have possess level of education in STPM/diploma/ matriculation/ foundation certificate (30.4%). Besides that, majority of respondents received salary between 2,000-2,999 (45.6%) and have between 1 to 2 years of working experience (45.6%).

Table 2: Summary of Demography Analysis

Item		Frequency	Percentage (%)
Gender	Male	73	46.2
	Female	85	53.8
Age	Below 21 years old	53	33.5
	21-30 years old	62	39.2
	31-40 years old	37	23.4
	41-50 years old	6	3.8
Level of Education	Primary school	55	3.2
	Secondary school	39	24.7
	STPM/ Diploma/	48	30.4
	Matriculation/ Foundation		
	Degree	47	29.7
	Master's Degree	18	11.4
	PhD	1	6
Monthly Salary	Less than 1,999	57	36.1
	2,000-2,999	72	45.6
	3,000-3,999	24	15.2
	4,000-4,999	4	2.5
	5,000 and above	1	0.6
Number of years	Less than 1 year	51	32.3
working	1-2 years	72	45.6
-	3-5 years	28	17.7
	More than 5 years	7	4.4

3.3 Descriptive Analysis for Job Design

Table 3 the summarize the descriptive analysis for job design which comprises of skill variety, task identity, task significance, autonomy and feedback. Based on the table, skill variety has highest value of mean which is 4.125, followed by feedback and task identity which the level of mean is 4.12 and 3.923 respectively. Next, the level of mean for task significance is 3.50 while autonomy is the lowest value of mean with 2.56. In overall, the job design had a mean of 3.65 and standard deviation of 0.708. This reflects that the level of job design among employees in service sector is at a medium level.

Table 3: Descriptive Analysis for Job Design

Variables	Mean	Standard Deviation	Level
Skill Variety	4.125	0.576	High
Task Identity	3.923	0.741	High
Task Significance	3.50	0.685	Medium
Autonomy	2.56	0.723	Medium
Feedback	4.12	0.816	High
Overall	3.65	0.708	Medium

3.3 Descriptive Analysis for IWB

Table 4 shows the level mean and standard deviation for innovative work behavior. The highest value of mean is 3.36 where the statement is "I wonder how can things can be improved". While the lowest value of mean is 2.98 with statement of "I make important organizational members enthusiastic for innovative ideas". In overall, the total average mean and standard deviation for IWB are 3.18 and 1.189 respectively which reflects moderate level for innovative work behavior

Table 4: Innovative Work Behavior

No.	Item	Mean	Std.	Level
			Deviation	
1.	I pay attention to issues that are not part of my daily work.	3.15	0.932	Medium
2.	I wonder how things can be improved.	3.36	0.883	Medium
3.	I search out new working methods, techniques or instruments.	3.25	1.040	Medium
4.	I generate original solutions for problems.	3.34	0.955	Medium
5.	I find new approaches to execute tasks.	3.08	1.022	Medium
6.	I make important organizational members enthusiastic for innovative ideas.	2.98	1.181	Medium
7.	I attempt to convince people to support an innovative idea.	3.28	1.101	Medium
8.	I systematically introduce innovative ideas into work practices.	3.13	0.982	Medium
9.	Î contribute to the implementation of new ideas.	3.06	1.098	Medium
10.	I put effort in the development of new things.	3.18	0.900	Medium
	Total	3.18	1.819	Medium

3.3 Normality test

Table 5 shows the result of normality test using Kolmogorov-Smirnov to identify whether the data of the study is normal distribution or not. The result of normality indicates that the data collected for all independent variable which are skill variety, task identity, task significance, autonomy and feedback are not normal because the significant value below 0.05. While the dependant variable which is innovative work behavior is normal where the significant value 0.069 which means that it is more than 0.05. Therefore, all variables for normality test are assumed as a not normally distributed.

Table 5: Normality test

	Kolmogorov-Smirnov		Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig
Skill Variety	.210	158	.000	.943	158	.000
Task Identity	.103	158	.000	.967	158	.001
Task Significance	.154	158	.000	.951	158	.000
Autonomy	.205	158	.000	.914	158	.000
Feedback	.185	158	.000	.894	158	.000
Innovative Work Behavior	.069	158	.064	.977	158	.009

3.3 Correlation Analysis

Table 6: The correlation between variables of Job Design and IWB

Independent variable		Dependent variable		
independent variable		Innovative Work Behavior		
Chill Wariata	Spearman Correlation	0.267**		
Skill Variety	Sig. (2-tailed)	0.001		
T1-11	Spearman Correlation	0.12		
Task Identity	Sig. (2-tailed)	0.134		

Task Significance	Spearman Correlation	0.287**
	Sig. (2-tailed)	0.000
Autonomy	Spearman Correlation	0.317**
	Sig. (2-tailed)	0.000
Feedback	Spearman Correlation	0.031
	Sig. (2-tailed)	0.696

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

Table 6 shows that spearman correlation between job design and innovative work behavior. The result depicts that the value of Spearman's rho correlation for skill variety is r = 0.267 with significant value p<0.01. This indicates that there is positive and very weak relationship between skill variety and innovative work behavior. Next, the significant value for task identity is r = 0.134 (p>0.01). As a result, hypothesis null is accepted. Thus, there is no relationship between task identity and innovative work behavior.

Besides that, based on the table above, the value of correlation analysis for task significance is r = 0.287 and the significant value is 0.000 (p<0.01). The results indicates that task significance has a positive and very weak relationship between innovative work behavior. In addition, the significant value of autonomy towards innovative work behavior is 0.000 (p<0.01) where the value of Spearman's rho correlation coefficient is r = 0.317. This indicates that there is a positive and weak relationship between autonomy and innovative work behavior. While, correlation coefficient for feedback is 0.031 with significant value is r = 0.696 (P>0.01). Thus, there is a no relationship between feedback and innovative work behavior and H5 is rejected.

4.7 Research questions

(a) Research Question 1: What is the level of job design among employees in services sector?

In job design, there is five job characteristics which consists of skill variety, task identity, task significance, autonomy and feedback. The total average of mean for skill variety is 4.125 which reflects high level. The results proved that the respondents agreed that skill variety is important in services sector. Thus, employees in service sector believed that they had been given jobs that allow them to gain exposure to a variety of skills and activities. Next, the level of task identity is high among employees in service sector in Ampang, Selangor with mean of 3.923 and standard deviation of 0.741. This reflect that most of the respondents agreed that task identity is important. This suggest that employees in service sector believe that they prefer a job that require them to complete the job from the beginning until the end.

The total average of mean and standard deviation for task significance is 3.50 and 0.685 respectively which reflects that it is at the moderate level. This reflects that employees in service sector moderately practice the task significance. Besides that, the results shows that most of the employees perceived that their work moderately significant impact other people in or outside. While, the total average of mean and standard deviation for autonomy is 2.56 and 0.723 respectively which clearly seen that it is at the moderate level. This reflects that employees in service sector believe that the company moderately give autonomy in allows freedom, independence and discretion to schedule work, make decisions to the employees.

Last but not least, the result shows that the level of mean for feedback is 4.12 which considered as high level. This is means that employees in service sector perceived that the organization give feedback toward their job. Employees with high job feedback and support by their organization will have a greater impact on work engagement over time.

(b) Research Question 2: What is the level of innovative work behavior among employees in services sector?

The results shows that the level of innovation work behavior among employees in service sector is at the moderate level. In overall, the total average mean and standard deviation for IWB are 3.18 and 1.189 respectively. These result shows that it can be utilized to inculcate innovation work behavior among employees in services sector as employee innovative individual able to generate new ideas and set the goal by using creative and employee innovative methods.

The results support the notion that employees in service sector need some driving force to help them overcome challenges associated with innovative work (Hammond et al., 2011). Previous studies have stated that innovative work behavior is encouraged when the experiment is valid and guilt is not given to get out of the routine way of doing something (Abstein & Spieth, 2014). Besides that, innovative behavior of employees is considered to be a self-initiated activity, which seeks to improve existing conditions or create the news one.

(c) Research Question 3: What is the relationship between job design and innovative work behavior among employees in services sector?

The coefficient value of 0.267 indicates that there is a positive and low relationship between skill variety and innovative work behavior. The result reflects when employees in service sector have high skill variety, they more willing to enhance creativity, which in turn demonstrates innovative work behavior. Besides that, employees in service sector allow them to experience different skill sets and activities tend to be more innovative because they are exposed to doing a variety of things. The findings of this study supported the previous study conducted by Suseno *et al.* (2019), job design with high levels of tasks and skill variety enhances employee creativity and idea.

This study found no relationship between task identity and innovative work behavior. Therefore, hypothesis two is rejected. The result of this research implies that employees in service sector with task identity is not related with innovative work behavior. Previous studies also found that task identity has no impact to innovative work behavior (Yang & Cho, 2015). This implies that employees who experienced in task identity would not be stimulated to engage in innovative work behavior. Thus, task identity which required them to complete job from beginning to end among employees in service sector might not encourages them to try out new methods to adopt innovation and creativity.

The results for correlation coefficient for this study indicate that the relationship between task significance and innovative work behavior is r=0.287. This reflect that task significance has a positive and very weak relationship between innovative work behavior. Therefore, hypothesis three was supported which is in agreement with findings on past studies (Cangialosi *et al.*, 2021). This implies that task significance is important in driving an employee to be innovative because employees in service sector believe that their work has a meaningful impact on others.

The data analysis conducted on the relationship between autonomy and innovative work behavior also shows that autonomy has positive and significant relationship between autonomy and innovative work behavior. The value of Spearman's rho correlation coefficient is r=0.317 which reflects that there is a positive and weak correlation between autonomy and innovative work behavior. As a whole, hypothesis four is accepted. This proved that treating autonomy among employee in service sector is important because difference facets can differently impact work outcomes especially in innovative work behavior. The more treating autonomy is shared among employees in service sector, the more they likely to be innovative at the workplace. This finding also supported by previous studies in which job autonomy has been demonstrated to have an impact on IWB (Werleman., 2016)

This study also found that feedback has no relationship between innovative work behavior. The result reflects that feedback does not to affect employees to become innovative. This findings also been

supported by previous studies which found that feedback-seeking behavior has no significant relationship with innovative workplace (De Stobbeleir et al., 2011). This implies that not all employees in service sector are equally motivated to use feedback seeking as a strategy to enhance their creativity and innovation.

5. Conclusion

As a conclusion, this study determine the relationship between job design and innovative work behavior. In overall, only 3 out 5 hypotheses been supported. Specifically, only skill variety, task significance and autonomy have a significant relationship between innovative work behavior. Hence, it can be concluded that job design could influence the innovative work behavior among employees in services sector. Several recommendations can be made to further improve the findings. Firstly, the time for data collection of this study can be expanded to improve response rate. Moreover, the future researcher should conduct this study in different scope of study such as different regions or states to increase the validity and reliability of the data collected. Lastly, future studies are recommended to combine both qualitative and quantitative method to add more details and valuable information in the future research.

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References

- Abstein, A., & Spieth, P. (2014). Exploring HRM meta-features that foster employees' innovative work behaviour in times of increasing work-life conflict. *Creativity and Innovation Management*, 23(2), pp. 211–225.
- Alabood, A., & Manakkattil, S. (2020). The relationship between career maximization and employee engagement. *Management Science Letters*, February 2021, pp. 2597–2602.
- Andrew, L., Haris, N., Zakariah, H., & Athirah, N. (2016). Job Characteristics and Job Satisfaction Among Employees: A Case Study At Craun Research Sdn. Bhd., Kuching, Sarawak. International Academic Research, *Journal of Business and Technology*, 2(2), pp.165–171.
- Belias, D., & Sklikas, D. (2013). Aspects of Job Design. *International Journal of Human Resource Management and Research*, 3(4), pp. 85–94
- Cangialosi, N., Battistelli, A., & Odoardi, C. (2021). Designing innovative jobs: a fuzzy-set configurational analysis of job characteristics. *Personnel Review*.
- De Jong, J., & Den Hartog, D. (2010). Measuring innovative work behaviour. *Creativity and Innovation Management*, 19(1), pp.23–36.
- De Spiegelaere, S., Van Gyes, G., & Van Hootegem, G. (2012a). Job Design and Innovative Work Behavior: One Size Does Not Fit All Types of Employees. *Journal of Entrepreneurship, Management and Innovation*, 8(4), pp.5–20.
- De Spiegelaere, S., Van Gyes, G., Vandekerckhove, S., & Hootegem, G. Van. (2012b). Job Design and Innovative Work Behavior: Enabling Innovation Through Active or Low-Strain Jobs? SSRN Electronic Journal, April.
- De Stobbeleir, K. E. M., Ashford, S. J., & Buyens, D. (2011). Self-regulation of creativity at work: The role of feedback-seeking behavior in creative performance. *Academy of Management Journal*, *54*(4), pp.811–831.
- Giebels, E., de Reuver, R. S. M., Rispens, S., & Ufkes, E. G. (2016). The Critical Roles of Task Conflict and Job Autonomy in the Relationship Between Proactive Personalities and Innovative Employee Behavior. *Journal of Applied Behavioral Science*, 52(3), pp.320–341.
- Hammond, M. M., Neff, N. L., Farr, J. L., Schwall, A. R., & Zhao, X. (2011). Predictors of Individual-Level Innovation at Work: A Meta-Analysis. *Psychology of Aesthetics, Creativity, and the Arts*, 5(1), pp.90–105.
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. Organizational behavior and human performance, 16(2), 250-279.
- Hernaus, T. (2016). Job design at the crossroads: from 'creative' jobs to 'innovative' jobs. *Capitalizing on Creativity at Work*, pp.17–28.
- Krejcie, R. V. & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, pp. 607–610.
- MIDA. (2019). OECD Economic Surveys: Malaysia 2019. July.
- Morgeson, F. P., & Humphrey, S. E. (2006). The Work Design Questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology*, 91(6), pp.1321–1339.
- Parker, S. K., & Ohly, S. (2010). Extending the reach of job design theory: Going beyond the job characteristics model. In The SAGE Handbook of Human Resource Management (Issue January).
- Prieto, I. M., & Pérez-Santana, M. P. (2014). Managing innovative work behavior: The role of human resource practices. *Personnel Review*, 43(2), pp.184–208.
- Rajguru, K. (2019). What is Job Design? Economics Discussion, pp. 4–7. https://www.economicsdiscussion.net/human-resource-management/what-is-job-design/31762
- Suseno, Y., Standing, C., Gengatharen, D. & Nguyen, D. (2019), Innovative work behavior in public sector: The roles of task characteristic, social support and proactivity, *Australian Journal of Public Admin*, pp.1-9.
- Werleman, A. A. (2016). The Effect of Enriched Job Design on Innovative Work Behaviour. August.
- Yang, H.-C., & Cho, H.-Y. (2015). Effects of Individuals, Leader Relationships, and Groups on Innovative Work Behaviors. *Journal of Industrial Distribution & Business*, 6(3), pp.19–25.
- Zacher, H., Dirkers, B. T., Korek, S., & Hughes, B. (2017). Age-differential effects of job characteristics on job attraction: A policy-capturing study. *Frontiers in Psychology*, 8, pp.1–11.