

# The relationship between Human Resource Management Practices, Psychological Contract and Innovative Behaviours of Academicians

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**Abstract---** *Innovative behavior is a behavior that directly and deliberately alter something by creating a different state with the current state of affairs. This can only happen if the employee is motivated and is associated with an employee's psychological contract. While organizations are responsible for managing their human resource management such as recruitment and selection, employee training, performance appraisal, rewards and incentives to fulfill this psychological contract. The purpose of this research is to test whether human resource management (HRM) practices have a positive impact on the fulfillment of psychological contracts to academics, which would enhance the innovative behavior of academic staff in private universities. Quantitative methods with stratified random sampling by supervisors of ten universities that have agreed to take part in this study have been conducted. The researchers only managed to collect as many as 183 samples where the rate of reaction was 51%. However, only 165 responses were usable. The findings show that the Innovative behavior of academic staff is associated with a psychological contract where it is influenced by human resource management practices. Only recruitment and selection are not significant in this study. The future recommendations of the study and the limitations of the study have been present in detail.*

**Keywords---** *Recruitment and Selection, Training and Development, Performance Appraisal, Rewards and Incentives, Psychological Contract, Innovative Behavior.*

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## I. INTRODUCTION

This research aims to highlight the importance of psychological contracts and human resource management (HRM) which are essential to enhance the innovative behavior of academicians who conduct research at private universities (Guest, 2017). HRM practices include recruitment and selection, employee training, performance appraisal, rewards and incentives. These variables often affect the psychological contract of a worker (Guest, 2016).

An organization that fails to balance HRM practices can cause a psychological contract of an employee to be unfulfilled and ultimately it will have a negative impact on innovative behavior as stated by Chang, Hsu, Liou, and Tsai, (2013). This is because an employee will realize that their efforts very much appreciated and they will expect this psychological contract to fulfil. If their psychological contract is fulfilled by the organization, in return, they

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will be motivated to do better, in which there will be innovative behaviours. However, if employees do not get what they expect from these human resource practices, some of them will try to voice. Otherwise, at the end of the day they may be acting not innovative at work. Eventually, overall organizational performance will decline and undermine the organizational gains (Knights, & Kennedy, 2005; Burke, 2017).

According to Kosasih (2016), innovativeness defined as individual or other unit's degree of adopting new idea earlier than the other members of adopt system. Innovation perceived by individual in teaching is that a creative reform that include new methods or ways used by educators to achieve the purposes of teaching (Muda & Yusuf, 2015). Organization innovative defined as the outcome, process and product of attempts to develop and introduce new and improved ways of doing thing. (Anderson, Potočnik & Zhou, 2014).

It is important that lecturer should be innovative for their teaching. This is because students are able to develop their creativity, independence in decision making and can improve the quality of training students (Borisova, Vasbieva, Malykh, Vasnev & Bírová, 2016). Moreover, since society is changing rapidly, the increase of demand in the knowledge society as well as the new technologies and new insight about teaching, it is crucial that lecturer always keep up to date and be innovative (Thurlings, Vermeulen & Evers, 2015).

The way to improve lecturer's innovation is by doing research and publishing in high impact journals. This innovative way will focus on innovative teaching based on the belief that every student has the ability to learn and succeed in his career. A lecturer should see each student have unique personality characteristics that can be polish by using creative and innovative teaching methods. These academics need to be aware of how innovative will help in the learning process and eventually identify the problems faced by students in their subjects (Naz & Murad, 2017).

The psychological contract is in the midst of the delivery of human resource strategies in which it is to enhance human capital management in the workplace as mentioned by Patricia Hewitt (Guest, 2017). All of these are about trust, meaning, hearing, pride and flexibility to build good human resource practices so employees can join a team by encouraging them to stick to and achieve organizational goals. It is seen as a psychological contract affecting work attitudes such as different job satisfaction for senior and junior workers because senior employees have better self-control capabilities and have built a stable psychological contract within the organization so that they respond differently than new employees to meet or break Psychological contracts (Bal, De Lange, Jansen, & Van Der Velde, 2008). The purpose of this research is to determine whether human resource management (HRM) practices have a positive impact on the fulfillment of psychological contracts to academics, which will enhance innovative behavior.

## **II. LITERATURE REVIEW**

Human resources are the most important source that can provide competitive advantages to the organization. According to a firm-based perspective, human resources can provide competitive advantages when human resources are unique, possessing competence and impractical capabilities (Barney 1991; Becker & Huselid 1998; Boselie, Paauwe, & Jansen, 2000). Reflecting on these perspectives, researchers in the field of organizational management have introduced human resource management theories human resources which emphasizes effective management of human resources to reduce operating costs through the development of employee competencies, on the otherh and (Boselieetal., 2000; Becker& Huselid 1998).

This psychological contract will result in organizational outcomes such as innovative behaviors towards organizational innovation.

According to social exchange theory, workers and employers are involved in the exchange of which one party reciprocated the contribution of the other party (Blau 1964). When workers see their psychological contract fulfilled, they will recognize the same exchanges in their relationship with the organization (Morrison & Robinson 1997). In line with that, workers will counter react by doing something positive as a contribution to employers (Gouldner 1960). Expectations that employers fulfill their obligations to employees may also influence employee behavior in social exchange relationships. For example, employees who realize that what they receive is more than promised, is more willing to innovate (Agarwal,2017).

### ***Relationship of Performance Appraisal and Psychological Contract Fulfillment***

Performance management is more shape to conduct evaluations or series of assessments at a time and is an integral part of human resource management. Employers should provide employees with appropriate support and conditions to obtain the desired performance evaluation by employer been fulfilled by employee (Harrington, & Lee, 2015). When the employee shows the expected performance of the employer, the employee expects their employer or supervisor to give a fair prestige assessment as a reward for the psychological contract to be fulfil. Base from discussion above below hypothesis have been develop:

*H1: There is a positive relationship between Performance Appraisal and Psychological Contract Fulfillment*

Relationship of Recruitment and Selection and Psychological Contract Fulfillment The hiring and selection of workers in an organization is a very important function to ensure the success of human resource management. Without a good recruitment and selection strategy, the organization will have some negative effects. Manap, Noh, and Syahrom, (2017) emphasize that employee recruitment and selection practices will affect the overall performance of the organization. Actually, the general purpose of recruitment and selection of workers is to find the best employees for a suitable job. In addition, the top management will form a psychological contract during the interviews as well as in the posts advertisement offered. When the employee observes this promise, a psychological contract will be form with employers and workers. When the promises they make during the recruitment and selections are fulfill, workers will be more innovative. It is on this basis that recruitment and selection of workers are carried out carefully and in accordance with established procedures. (Delobbe, Cooper-Thomas, & De Hoe, 2016). Base from discussion above below hypothesis have been develop:

*H2: There is a positive relationship between recruitment and selection and Psychological Contract Fulfillment*

### ***Relationship between Reward and Incentive and Psychological Contract Fulfillment***

The psychological contract conceptualized into three main components of promise, payment and acceptance (Rousseau, 1989). Promise is an implied or explicit agreement for future behavior in written or verbal form (Rousseau & Parks, 1993). Payments are what employees expect to earn when their promise met. For example, if an employee achieves a set sales level, they will expect a psychological contract that has already existed before reaching a sales stage) the manager will reward his / her achievements psychological contract fulfillment.

While acceptance is defined as voluntary involvement in the contracting process (Ahmad, Nisar, & Naqvi, 2016). This means that a psychological contract will be fulfilled if the expected reward of the employee received when the employer completes it. Based on discussion above below hypothesis have been developed:

*H3: There is a positive relationship between Reward and Incentive and Psychological Contract Fulfillment*

#### ***Relationship between Training and Development and Psychological Contract Fulfillment***

Employee training and development is an important organizational activity because of its impact on employee productivity. Orientation and training help new employees become productive workers within the organization and experienced workers can accept changes and work requirements (Wu, & Chen, 2015). The development program gives the employee the opportunity to grow and progress in the career either inside or outside the organization. Therefore, employees will expect the training promised by the employer (Mohamed, Nor, & Dahalan, 2014). A psychological contract will exist between the employee and the employer where the employer knows that the employee needs appropriate training. The workers will then take the training for their careers. The whole process further improves the quality of the organization's human resources, where it meets the needs of the employees and contributes to the smooth movement of innovative organizations (Ricks, Ginn, and Daughtrey, 1995). Based on discussion above below hypothesis have been developed:

*H4: There is a positive relationship between Training and Development and Psychological Contract Fulfillment*

#### ***Relationship between Psychological Contract Fulfillments and innovative behavior***

Innovation is wider that includes creativity and application, implementation or implementation of new ideas that are useful to the working group, organization or community (King & Anderson, 2002; Bryson, 2018) Wooten, and Ulrich (2017) define innovation as a process of change that begins with the generation of ideas and ends with the successful execution of these ideas in the organization. Thus, innovation involves the innovative behavior of workers in performing tasks at work. Specifically, innovative behavior will occur when employers fulfill all their promises (Wu & Chen, 2015). Workers are more likely to be innovative when their psychological contract is fulfilled. Based on discussion above below hypothesis have been developed:

*H5: There is a positive relationship between Psychological Contract Fulfillments and innovative behavior*

### **III. METHODOLOGY / MATERIALS**

Researchers need to follow sampling method in research to collect information from large populations that are easy to provide analysis (Zikmund & Babin, 2010). The selection of academics in private universities is by a purposive sampling method by selecting the supervisors of the ten universities who agreed to participate in the study.

Each University was assigned 36 survey forms representing a wide range of age populations, long serving, gender and positions. Therefore, the required number of samples is 357 by population estimated at 5000 in this research. The researchers only managed to collect as much as 183 samples where the response rate was 51%. However, only 165 were usable responses (see Table 1).

Participants in this study were lecturers from private universities and their supervisors from 10 universities in

Malaysia. Although there are many private universities in Malaysia, only 10 universities have authorized to distribute questionnaires. We contact and obtain permission and support for data collection from every human resource department. Next, we contacted the dean of each faculty to distribute our questionnaire and send them a survey package. We collect data from two sources: their closest lecturers and supervisors.

The questionnaire includes five Likert scales on human resource management and psychological contracts. The supervisor studies assessed the supervisory perceptions that measure the innovative behavior of lecturers. The supervisor rated between three to five lecturers. Each survey package includes a questionnaire, and a cover letter explaining the purpose of the study, emphasizing confidence and not recognizing the answer, and instructing the participants to return the questionnaire to the researcher through a sealed envelope.

Innovative behavior was measured using a 9-item scale that was developed by Janssen, (2000). Their Immediate supervisors rated how often the subjects performed the nine innovative work behaviors in the workplace from 1 (never) to 5 (always). While the Psychological Contract scales adopted from Robinson & Morrison (2000) and perceived human resource management practices from Absar, Azim and Balasundaram (2010), Rahimi, Hashim, Tahsildari, and Khodakarami,(2013).

Table 1: Demographic profiles of respondents

		Frequency	%
Gender	Male	74	44.8
	Female	91	55.2
Age	25 below	14	8.5
	26-35	28	17.0
	36-45	80	48.5
	46-55	32	19.4
	56 >	11	6.7
Race	Malay	56	33.9
	Chinese	82	49.7
	India	27	16.4
Marital Status	Single	62	37.6
	Married	103	62.4

	Total	165	100.0
Tenure	<5years	37	22.4
	5-10	71	43.0
	11-15	28	17.0
	16-20	7	4.2
	>20	22	13.3
Position	Professor	1	.6
	Associate Professor	10	6.1
	Assistant Professor	17	10.3
	Senior lecturer	5	3.0
	Lecturer	129	78.2
	Tutor	3	1.8

## IV. RESULTS AND FINDINGS

### *Measurement model*

First, the measurement models of all constructs have been examined for reliability, validity of convergence and discrimination validity, before testing hypothetical models. Table 2 shows the scores obtained from the measurement model. Based on Table 2, it can be seen that all loadings are higher than 0.70 which is the threshold proposed by Hair, Hult, Ringle & Sarstedt (2013). The average variance extracted (AVE) of all constructs exceeds 0.5 (Bagozzi & Yi, 1988) while the composite reliability score (CR) is higher than 0.7 (Hair et al., 2013). Thus, we can conclude that Convergent conclusions are achieved.

The VIF has also been examined to test for possible issues of multicollinearity (Table 2). A range of below 3.3 to 5 of the VIF values for all the constructs confirms sufficient construct validity by a lack of multicollinearity. This is also because the values fall significantly below the minimum threshold of 9 (Yong & Pearce, 2013).

We tested the discriminant validity using the HTMT to assess discriminant validity:

(1) as a criterion or (2) as a statistical test. For the first one, if the HTMT value is greater than HTMT.85 value of 0.85 (Kline 2015), or HTMT.90 value of 0.90 (Gold & Arvind Malhotra, 2001) then there is a problem of discriminant validity (see Table 3).

Table 2: Convergent validity

Items	Loadings	CR	AVE	VIF
IB2	0.721	0.908	0.624	1.972
IB3	0.733			2.051
IB4	0.806			2.505
IB6	0.775			2.228
IB8	0.827			2.694
IB9	0.867			3.193
PA11	0.791	0.905	0.657	1.79
PA12	0.778			1.77
PA13	0.806			2.044
PA14	0.791			1.983

<i>PA15</i>	<i>0.884</i>			<i>2.879</i>
<i>PC1</i>	<i>0.884</i>	<i>0.95</i>	<i>0.79</i>	<i>3.022</i>
<i>PC2</i>	<i>0.867</i>			<i>2.775</i>
<i>PC3</i>	<i>0.918</i>			<i>4.024</i>
<i>PC4</i>	<i>0.908</i>			<i>3.66</i>
<i>PC5</i>	<i>0.867</i>			<i>2.749</i>
<i>R116</i>	<i>0.812</i>	<i>0.916</i>	<i>0.687</i>	<i>2.12</i>
<i>R117</i>	<i>0.831</i>			<i>2.509</i>
<i>R118</i>	<i>0.811</i>			<i>1.944</i>
<i>R119</i>	<i>0.821</i>			<i>2.118</i>
<i>R120</i>	<i>0.867</i>			<i>2.79</i>
<i>RS1</i>	<i>0.744</i>	<i>0.856</i>	<i>0.599</i>	<i>1.51</i>
<i>RS3</i>	<i>0.765</i>			<i>1.455</i>
<i>RS4</i>	<i>0.759</i>			<i>1.529</i>
<i>RS5</i>	<i>0.825</i>			<i>1.897</i>
<i>TD10</i>	<i>0.838</i>	<i>0.861</i>	<i>0.674</i>	<i>1.767</i>
<i>TD8</i>	<i>0.836</i>			<i>1.805</i>
<i>TD9</i>	<i>0.788</i>			<i>1.326</i>

Note: PA: performance appraisal RI: rewards and incentives RS: recruitment and selection, TD: training and development PC: psychological contract IB: innovative behavior, CR: Composite Reliability, AVE: Average Variance Extracted VIF: variance inflation factor

Table 3: HTMT

	IB	PA	PC	RI	RS	TD
IB						
PA	0.715					
PC	0.821	0.558				
RI	0.761	0.744	0.534			
RS	0.712	0.838	0.459	0.757		
TD	0.733	0.81	0.527	0.762	0.845	

Note: PA: performance appraisal RI: rewards and incentives RS: recruitment and selection, TD: training and development PC: psychological contract IB: innovative behavior

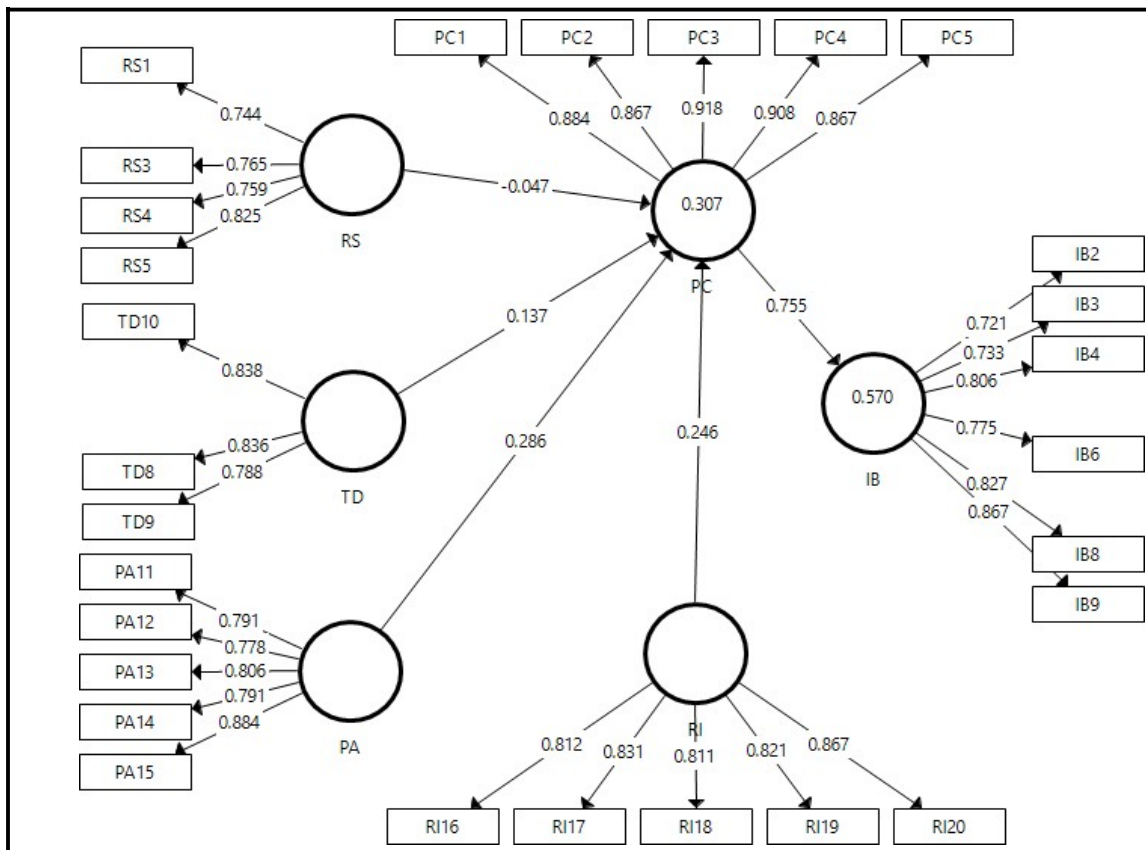


Figure 1: Measurement Model

**Structural Model**

To examine the statistical significance of path coefficients, Hair, Ringle, and Sarstedt (2011) recommended a minimum threshold of 1.65 t-statistics values at  $p \leq 0.1$  confidence interval. Likewise, Lowry and Gaskin (2014) espouse that effect sizes of 0.35, 0.15, and 0.02 indicate a large, medium, and small effect, respectively. Sarstedt Ringle, Smith, Reams and Hair (2014) highlighted that  $R^2$  values of 0.75, 0.50, and 0.25 reflect substantial, moderate, and weak values respectively.

To assess the model fit, the  $R^2$  which is the amount of variance explained by all the independent variables is assessed. According to Chin (1998), states that for a strong  $R^2$  you need a value of 0.67, while for moderate need a value of 0.33 and for a weak  $R^2$  need a value of 0.19. Besides, according to Hair et al. (2016), the R square of 0.75 is strong, 0.5 is moderate, and 0.25 is weak. Next, Falk and Miller (1992) recommended that  $R^2$  should be equal to or bigger than 0.10 in order, for the variance explained of a particular endogenous construct to be deemed adequate.

To attain the significance levels, the consistent PLS bootstrapping option was initiated using 5000 subsamples (Hair et al., 2014). Hence, the  $R^2$  for this study is acceptable (0.307) and (0.57) as per table 4.

Table 4 shows the entire hypothesis stated down from H1 to H5. It also contains the t- values for each hypothesis. When the hypothesis is significant, the t-value is more than 1.645 ( $p < 0.05$ ), t-value more than 2:33 ( $p < 0.01$ ) for 1-tail test. From Table 4 indicates that there are four hypotheses, which are H1, H3, H4 and H5 are supported while H2 was not supported.

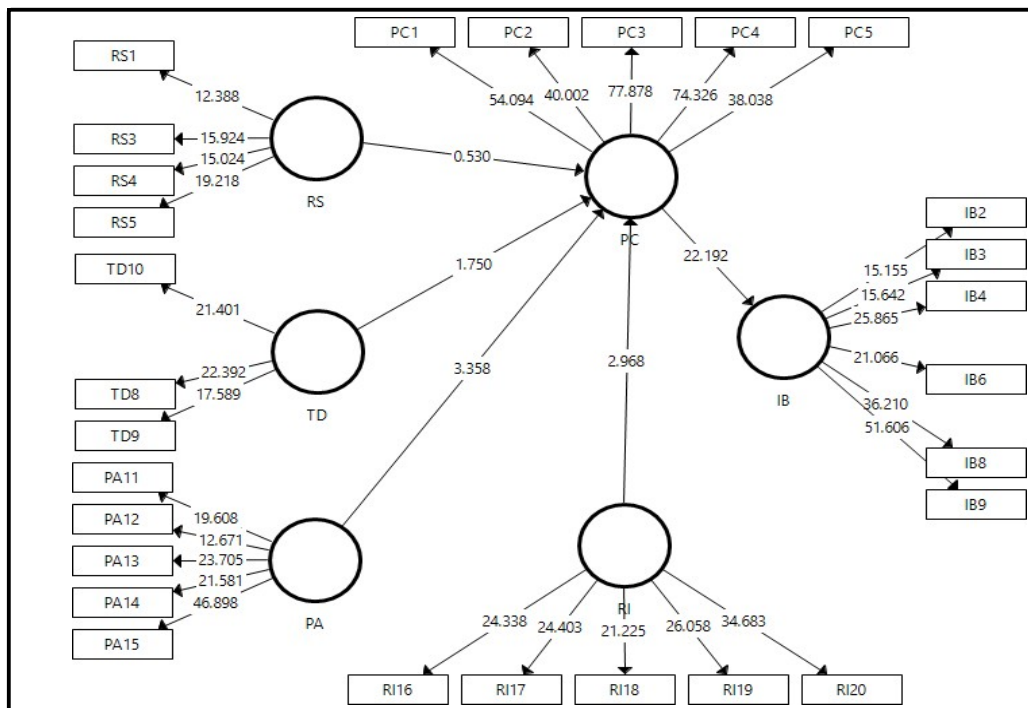


Figure 2: Structural Model Table 4 Hypothesis results



No	Hypothesis	Beta Value	St dev	T Values	p-values	LL	UL	R <sup>2</sup>	f <sup>2</sup>	Q <sup>2</sup>	Decision
H1	PA $\diamond$ PC	0.286	0.085	3.358	p< .001	0.15	0.43	307	0.049	0.225	<b>Supported</b>
H2	RS $\diamond$ PC	-0.047	0.089	0.53	0.298	-0.192	0.097		0.001		Not Supported
H3	RI $\diamond$ PC	0.246	0.083	2.968	0.002	0.106	0.379		0.042		<b>Supported</b>
H4	TD $\diamond$ PC	0.137	0.078	1.750	0.040	0.009	0.268		0.013		<b>Supported</b>
H5	PC $\diamond$ IB	0.755	0.034	22.192	p< .001	0.69	0.802	0.57	1.328	0.328	<b>Supported</b>

## V. DISCUSSION AND IMPLICATIONS

Human resource management is an activity that focuses on individual elements of thinking, behavior and emotions at work when their psychological contract is not met. The first hypothesis is to identify whether Performance Appraisal has a positive relationship to Psychological Contract Fulfillment. The results show that, the beta estimate for this hypothesis is 0.286. Its mean that 28.6% of the psychological contract fulfillment of academic staff can be explain by performance appraisal and it is significant at 0.05 alpha value. Therefore, we can clearly say that the psychological contract by the academic is only fulfill by only 28.6%, which contributes to the second highest. Because of this, the university must re- evaluate their performance system assessment, which is less influence by psychological contracts by their academics. This is extremely discouraged as mentioned by (Harrington, & Lee, 2015) where Assessment of employee work achievement is essentially a systematic assessment of the performance of the employee itself and the level of potential of employees in the effort to develop themselves for the benefit of the organization's organization.

The Second hypothesis is to identify whether recruitment and selection have a positive relationship to Psychological Contract Fulfillment. The results show that the beta estimate for this hypothesis is -0.047. Its mean that -4.7% of the psychological contract fulfillment of academic staff can be explained by recruitment and selection and it is not significant at which is below alpha value 0.05. Therefore, we can clearly say that the psychological contract by the academic is not been met as it is reduced to -4.7% which contributes to the lowest among all variables. In other words, the University has experienced serious problems in the recruitment and selection of which is expected by their academics. This is extremely have mentioned by Manap, Noh, and Syahrom, (2017) where, the general purpose of recruitment and selection of workers is to find the best employees for a suitable job and the top management will form a psychological contract during the interviews as well as in the post's advertisement offered.

The third hypothesis is to identify whether rewards and incentive have a positive relationship to Psychological Contract Fulfillment. The results show that the beta estimate for this hypothesis is 0.246. Its mean that 24.6% of the psychological contract fulfillment of academic staff can be explained by rewards and incentive and it is significant at 0.05 alpha value. Therefore, we can clearly say that the psychological contract by the academic is only fulfilled by only 24.6%, which contributes to the third highest. Because of this, the university must re- evaluate their rewards and incentives system assessment, which is less influenced by psychological contracts by their academics. This is mentioned by Ahmad, Nisar and Naqvi (2016) where Reward and incentives are a concept developed from a human

resource management concept, primarily aimed at motivating a person to do good and improving his or her performance when their psychological contract is fulfilled.

The fourth hypothesis is to identify whether Training and development have a positive relationship to Psychological Contract Fulfillment. The results show that the beta estimate for this hypothesis is 0.137. Its mean that 13.7% of the psychological contract fulfillment of academic staff can be explained by Training and development and it is significant at 0.05 alpha value. Therefore, we can clearly say that the psychological contract by the academic is only fulfilled by only 13.7%, which contributes to the fourth highest. Anyway, the contribution is too low as the university must re-evaluate their training and development system, which is less influenced by psychological contracts by their academics. This means that the training and development obtained by academics is still insufficient for them to be innovative. This is extremely have mentioned by Ricks, Ginn, and Daughtrey, (1995) where Training and development is a process further improves the quality of the organization's human resources, where it meets the needs of the employees and contributes to the smooth movement of innovative organizations

At last, the fifth hypothesis is to identify whether Psychological Contract Fulfillment has a positive relationship with Innovative behaviors of academic staff. The results show that the beta estimate for this hypothesis is 0.755. Its mean that 75.5% of the Innovative behaviors of academic staff can be explained by psychological contract fulfillment and it is significant at 0.05 alpha value. Therefore, we can clearly say that the Innovative behavior by the academic has influenced by only 75.5% Innovative behavior, which contributes to the first highest. Anyway, the contribution is the highest as the university proves that Innovative behavior can be achieved if psychological contract of their academic staff been met. This is true as said by (Wu & Chen, 2015)

## **VI. LIMITATION OF THE STUDY AND FUTURES STUDY SUGGESTIONS**

Researchers are aware of the limitations of this study although the findings have carefully drawn up. The boundary study should include the clearest boundaries of barriers in this study. During this research, there are identified limitations. First Most respondents are not willing to take part in surveys because academicians have a different time class that is different and when responding to the questionnaire it is very time consuming to finish it. This may affect their answers. However, most respondents try their best to work with researchers. However, it can only collect 183 sets of questionnaires and seven more are not answered fully. Apart from that time constraints and costs.

Financial resources also limit the researcher to conduct this study. Because this research has no sponsorship from the University or school, then printing expenses, other administrative expenses and transportation costs should be borne by only researchers. In addition, the time allocated for this research is limited to just a few months before performance evaluation in the organization.

Due to some policies and privacy concerns, many universities did not agree to participate in this study to answer questions because some questions are sensitive to university performance and some reputation information of the University. Additionally, the University's policy must ensure that all information about their university that avoids their privacy disclosure also refuses to participate in this questionnaire.

This study guides the right way for future research. The main hypothesis of this study is to determine whether human resource management (HRM) practices have a positive impact on the fulfillment of psychological contracts to academics, which will enhance innovative behavior. However, there are also suggestions for future research. Future studies can take different variables into this credible research model to examine the real issues of academic innovative behavior. Moderators or mediators may add a significant relationship between recruitment and selection, which are not significant in this current study. In addition, this study can be conducted in public universities that are not research oriented. Finally, this study can be done at the eastern Malaysian universities as well.

## VII. CONCLUSION

In conclusion, the Human Resource Management activity is a continuous improvement effort towards psychological contract fulfillment can enhance the innovative behaviors of employees. It covers personnel assessment, personnel development, research and intervention. It further enhances the effectiveness of human resource management in order to create a conducive and harmonious working environment in the universities.

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