



Developing and validating the measurement model for human resource management practice (HRM) construct using confirmatory factor analysis

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Abstract

This research aims to develop and validate reliable survey instruments measuring Human Resource Management Practice (HRM) construct. The pilot study was conducted using a survey questionnaire with 5 Likert scale which involved 200 employees from Group Network and Technology (GNT) division, Telekom Malaysia (TM). The Exploratory Factor Analysis (EFA) procedure has explored usefulness of measuring items and determined the dimensionality of the construct. The field research attained a random sample of 313 employees to survey using questionnaire via the newly developed instruments. The data from the field research were used to validate the instruments through the Confirmatory Factor Analysis (CFA) procedure. The EFA procedure found five components (Staff Competency Development, Strategic Leadership, Knowledge Development, Organizational Culture, Communication) that emerged from the items. The CFA procedure validated the instruments measuring HRM construct for uni-dimensionality, validity and reliability. The result showed that the measurement model of HRM construct achieved the requirement for construct validity and reliability and should be able to be used in future research. This study produced instruments to assess HRM implementation specifically among organizational leaders in TM.

Keywords: Human Resource Management Practice (HRM), Telekom Malaysia (TM), Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), Validity, Reliability

Introduction

The changes of technological transformation, competitive advantages, and fluctuation of economic situations in the 21st century is very important in a larger organization especially in telecommunication industry to ensure organizational sustainability. Transformation in technology gives better options to the organization but also lead to more challenges (Telukdarie, Buhulaiga, Bag, Gupta & Luo, 2018) ^[10]. In order to achieve high performance, organization need to adapt with these challenges (Mauro & Borges, 2020) ^[34]. The human resource management practice (HRM) field has been attracting nowadays as it can give significant impact towards organizational well-being and prosperity. Happy employees can lead to the success of human capital management which is able to create continuous business sustainability (Huang, Ahlstrom & Lee, 2016) ^[22]. Productive and efficient HRM nurtured in the organization will enhance the employees job satisfaction (Kale, Aknar & Basar, 2019) ^[27].

HRM has been a great attention and focus nowadays as it has been ratified as contributor towards organizational success (Conway, Fu, Monks, Alfes & Bailey, 2016) ^[16]. Burns (2016) ^[13] highlighted organizational leader strengthens HRM in order to improve individual and organizational performance. However, most of the organization often faced challenges on how to retain talented employees in the organization in line with direction of 2021's insightful and sophisticated technology. Focusing on HRM is the key factor to develop satisfied, productive and efficient workforce (Imran, Majeed & Ayub, 2015) ^[25].

Most of the the telecommunication industry in Malaysia has achieved drastic enhancement in previous years. Telekom Malaysia (TM) as one of the main telecommunication provider in Malaysia, places significant role in providing excellent customer experience via enhancing customer service quality and at the same time to improve employees productivity. Unfortunately, recently the HRM development progress is still low among developing countries especially in telecommunication industries such as in Malaysia. Almadani (2017) [3] highlighted telecommunication industries in most of developing countries encounter huge challenges as they are perceiving low perception in HRM which making low employee's motivation and organizational success. However, there is still lack of HRM instrument has been established to measure effectiveness of HRM practiced by organizational leaders. This instrument also not really suitable with organizational leaders in Malaysian context as it is keen towards western context (Opatha, 2009; Kottawatta, 2015) [40, 31].

This paper's objective is to produce and do assessment validation of the instruments to measure HRM construct among TM employees. This study develops the instruments from the Matching Model of HRM theory. All items were measured using the 5 Likert scale using 1 for none, 2 for rarely, 3 for sometimes, 4 for always and 5 for very always for the given statement. This research has been conducted via pilot test and field study. Researcher has conducted face validity and content validity with identified expert during pilot stage. Researcher collected the pilot study data and conducted the Exploratory Factor Analysis while collecting the field study data for field study. Researcher validated the construct validity, convergent validity, discriminant validity and composite reliability using field data.

2. Literature Review

Human Resource Management Practice (HRM) has become very important aspect in organization as it builds strong relationship between workforces. Human Resource is able to ensure employees are working happily and motivated in order to achieve organizational objective. HRM is a process of engaging resources in order to achieve organizational objective with guided procedures (Eneh & Awara, 2016) [18]. Wilton (2016) [45, 49] informed HRM is a task to manage employees hence to retain relationship between employer and employees via implementing correct actions and procedure. HRM is a set of tasks containing a few aspects such as leadership, training development, selection and performance appraisal that can guide employees to work collaboratively in performing their job hence to gain job satisfaction and achievement (Terera & Ngirande, 2014) [46]. HRM consist of recruitment, training development, performance evaluation, career progress, job function, employee involvement and rewards and recognition (Amin, Ismail, Rasid & Selemani, 2014) [4].

HRM plays key role in managing workforces as it is very important in delivering success to the organization. HRM is able to support continuous well-being and success to the organization (Arachchige & Robertson, 2015) [6]. Organizational leader that play best HRM across the organization is able to achieve organizational goal (Kale, Aknar & Basar, 2019) [27]. HRM organization will direct employees to collaborate and perform the task not only for future opportunities but to achieve expected outcomes. (Korff, Biemann, & Voelpel, 2017) [29]. Most of previous

research indicated HRM organization is able to increase individual work attitudes that can direct employees to contribute their best towards organizational success (Korff, *et al.*, 2017) [29]. HRM consist of few activities that increase employees' motivation (Ceylan, 2013; Ko & Ma, 2017) [17, 28], individuals' capability to meet organizational goals (Gangani, McLean & Braden, 2006; Nasriyah, Arham & Aini, 2016; Parikh & Desai, 2018) [19, 38, 41], enhancing employees' integrity (Krauss, 2016) [30] and performance appraisal (Lee, 2019) [32]. As a conclusion, HRM is capable to instruct and coach employees' action and attitude towards meeting organizational objective by developing stickiness and collaboration between people inside the organization.

Human Resource Management Practice (HRM) Dimensions

Human resource management practice plays important function in managing people. Human resource management plays key important function in providing success to the organization. HRM support continuous growth of organization (Arachchige & Robertson, 2015) [6]. Best HRM utilization is able to meet organizational goal (Kale, Aknar & Basar, 2019) [27], HRM has been classified as mangaging people towards achievement of organizational goal guided by organized procedure (Eneh & Awara, 2016) [18]. HRM is a key function to manage employees by using effective procedures and actions (Wilton, 2016) [45, 49]. Organization tends to become employee oriented as to overcome challenges in retaining employees in the organization.

Human resource functions can be described as procedures been taken by employees to retain success and happier employees in the organization. Itika (2011) [26]. states few HRM functions that need to be successfully administered by employees such as managing resources, performance evaluation, staff competency development, reward and recognition and manging organizational culture. HRM function in term of handling talented employees with improvement of staff training and career advancement will be main aspects in HRM functions (Anthonia & Omotayo, 2012) [5]. Learning and professional development, leadership and organizational culture act as key essential HRM function in managing employees (Ahammad, 2017) [1]. HRM functions to direct employees towards achieving organization success and well being by embracing the strategic leadership style, enhancing knowledge and skills of the employees as well as providing comfortable working culture among them.

There is no baseline of HRM measurement. Past research indicated that scarcity of HRM is a major issue in most developing countries including Malaysia. However, we can see that most organizations nowadays are suffering from achieving high performance due to low employees' attitude, behavior, and working output which significantly reduces the quality of goods and services (Vasudevan, 2014).

Exploratory Factor Analysis

Researcher conducted Exploratory Factor Analysis (EFA) prior continuing with Confirmatory Factor Analysis (CFA) (Nasir, Mohamad, Ghani & Afthanorhan, 2020) [37]. EFA has been classified as one of the most statistical method in recent research. In doing EFA, the researcher does not have assumptions of the variables as it is an exploratory. Hence, it provides the researcher to probe components to construct a model from latent constructs with identified items. EFA subsist of principal component analysis (PCA) that mostly

used for data reduction (Bentler & Kano, 1990) ^[12].

Upon performing the EFA procedure, the researcher set the value at 0.60 or above (Hair, Ringle & Sarstedt, 2011) ^[21]. Important indicator has been shown by high factor loading. Besides, EFA recommended the factor loading into the same component. Upon researcher perform the EFA, this emerged component will be used in structural equation modeling (SEM). SEM has two main models which is measurement model via CFA procedure and structural model.

Confirmatory Factor Analysis (CFA)

Confirmatory Factor Analysis (CFA) is important to be met before the researcher can conduct the Structural Equation Modelling (SEM) to ensure each of the indicators can represent the construct that needs to be measured in the research (Byrne, 2010; Hair *et al.*, 2011) ^[21]. The evaluation of the fitness index are parsimonious fit, absolute fit, and incremental fit (Awang, Lim & Zainudin, 2018) ^[9]. The researcher used a few measurements criteria index model fit to identify model fit which is (i) Chi-square/df (ii) Goodness-of-fit (GFI) (iii) Comparative fit index (CFI) and (iv) Root mean square error of approximation (RMSEA) (Dalila, Latif, Jaafar Aziz & Afthanorhan, 2020) ^[17]. Hence, researcher should ensure that both of this meet requirement. Therefore, conclusive measurement model is able to assist researcher make a valid analysis.

EFA and CFA Procedures

This research uses the EFA procedure to seek and validate the importance of items to measure the construct while CFA to validate the measurement of the construct. Researcher used data from pilot research to conduct EFA procedure while using field research for CFA procedure. This research developed items measuring Human Resource Management Practice (HRM) construct from previous theory and literature.

The EFA is able to measure factor loading for each item. The factor loading value is 0.60 (Bahkia, Awang, Afthanorgan, Chazali & Foziah, 2019) ^[11]. Researcher also identifies the Total Variance Explained (TVE) for the construct and define the measured items and components measured the construct (Mahfouz, Awang & Mida, 2019) ^[33]. The minimum value for TVE is 0.60 which indicates that the components and its items are able to measure at least 60% of the construct (Shkeer & Awang, 2019) ^[44]. Lastly, researcher conducted internal reliability analysis for the items via Cronbach Alpha which minimum value is 0.7. The internal reliability defines how much the chosen items are holding to each other to measure the construct (Rahlin, Awang, Afthanorhan & Aimran, 2019) ^[42].

Once researcher determined the components and the items, the researcher proceed to collect field data. Researcher conducted the CFA procedure to validate the construct by using this data. The CFA will identify the validity and reliability of the items to measure the construct (Mohamad, Afthanorhan, Awang & Mohammad, 2019) ^[35]. CFA procedure requires three types of validity which are construct

validity, convergent validity and discriminant validity (Yusof, Awang, Jusoff & Ibrahim, 2017) ^[48]. Researcher is able to measure composite reliability for the construct via CFA results (Aimran, Ahmad, Afthanorhan & Awang, 2017) ^[2]. Set of fitness indexes will identify the construct validity via the CFA procedure. The construct validity has fitness indexes to be met which are absolute fit, incremental fit and parsimonious fit (Awang, Lim & Zainudin, 2018) ^[9]. Table 1 shows summary of validity and reliability.

Table 1: Summary of Validity and Reliability

Validity		Name of Category	Threshold
Construct Validity	Fitness Indexes	Absolute Fit Incremental Fit Parsimonious Fit	RMSEA < 0.08 CFI & TLI > 0.9 Chisq/df < 3.0
Convergent Validity	Average Variance Extracted (AVE)		AVE > 0.5
Discriminant Validity	Discriminant Validity Index Summary		
Composite Reliability	CR		CR > 0.6

3. Research Methodology

Sampling and data collection

This research has been conducted using multi method research technique. It is a combination of quantitative approach via survey through questionnaire form to gauge respondents' feedback about the HRM practiced by the top management and qualitative research approach via instruments validation by field experts for face and content validity. A survey questionnaire study was widely used in most research studies because it saves time, energy, and cost (Majid, 1994) ^[36]. Researcher collected pilot and field data. For pilot research, researcher used 200 respondents while 313 respondents for field research. This respondent had been selected randomly from targeted all permanent non-executive and executive employees who hold Assistant Manager, Manager and Assistant General Manager positions from Group Network and Technology (GNT) division, TM. Identifying the sample size is an important element in providing quality of research (Cohen, Manion & Morrison, 2011) ^[15]. Researcher distributed a questionnaire via Google Form to respondents that been selected randomly via assistance form Human Capital Business Driver (HCB D).

4. Findings (Pilot Study)

Reliability Analysis

Researcher conducted reliability analysis to the items via Croanbach's alpha. The reliability also known as internal consistency shows the strength of statement elements in measuring that particular construct. The reliability of 0.7 and above is often used to determine the reliability of the research instrument and to indicate the elements achieve the internal reliability. (Sekaran & Bougie, 2010) ^[43]. Table 2 indicates five components with its Cronbach Alpha in measuring the HRM construct.

Table 2: Internal Reliability for Construct Human Resource Management Practice (HRM)

Construct	Component	Component Name	No. of Items	Cronbach's Alpha
Human Resource Management Practice (HRM)	1	Staff Competency Development	8	0.921
	2	Strategic Leadership Style	6	0.826
	3	Knowledge development	4	0.897
	4	Organizational Culture	4	0.777
	5	Communication	3	0.905
			25	0.939

In addition, the Cronbach's Alpha value for each component 1 (0.921), component 2 (0.826), component 3 (0.897), component 4 (0.777) and component 5 (0.905). All 25 items have Cronbach's Alpha value more than 0.7 which is 0.939. Therefore, the study concluded that the items that measure the HRM construct have adequate internal reliability hence the items are acceptable and reliable in measuring the response (Bahkia *et al.*, 2019; Hoque, Awang, Jusoff, Salleh & Muda, 2017; Hoque, Siddiqui, Awang & Baharu, 2018; Yahaya, Idris, Suandi & Ismail, 2018) ^[11, 23, 24, 47]. Result

shows that components emerged from EFA with their items to measure the HRM construct are reliable. Thus, this research suggested using this HRM construct in future studies.

Exploratory Factor Analysis (EFA) Procedure

Researcher analyzed the pilot data via EFA procedure using IBM-SPSS 25.0. Table 3 shows descriptive statistical analysis for items measuring HRM.

Table 3: Descriptive Statistical Analysis for Items Measuring HRM

Element	Item Statement	Mean	Std. Deviation
HR1	Unit Leader collaborates with subordinates to achieve the unit's goals.	3.21	0.804
HR2	Unit Leader is clear with the company's vision.	3.13	0.763
HR3	Unit Leader distributes human resources fairly.	3.39	0.721
HR4	Unit Leader allocate financial resources based on the needs and capabilities of the division.	3.24	0.696
HR5	Unit Leader is concerned with the welfare of staff (Example: Providing comfortable workspace facilities).	3.27	0.728
HR6	Unit Leader promotes staff based on their accomplishments as opposed to cronyism.	3.13	0.763
HR7	Unit Leader influences staff to conduct in-house competency development programs.	3.48	0.730
HR8	Unit Leader encourages staff career development.	3.19	0.726
HR9	Unit Leader makes decisions about staff performance appraisals based on agreement with the panel.	3.68	0.671
HR10	Unit Leader rewards and recognizes staff who show outstanding performance.	3.61	0.743
HR11	I was easily given permission to attend staff competency development programs	3.55	0.678
HR12	I have applied the content of staff competency development programs in my career.	3.54	0.742
HR13	I attended staff competency development programs based on career needs.	3.54	0.693
HR14	I was given a fair opportunity to attend a competency development program.	3.69	0.683
HR15	I was instructed to conduct in-house training after returning from an out-of-unit course.	3.75	0.678
HR16	I am comfortable with the management of competency development program because of the adequate facilities.	3.68	0.775
HR17	I was instructed to evaluate the effectiveness of the staff development program upon completion of the program.	3.70	0.723
HR18	I am actively involved in staff competency development program activities.	3.49	0.723
HR19	I found that facilitators of the staff competency development program activities have a high level of expertise.	3.59	0.846
HR20	I found my work productivity increased after attending the competency development program.	3.65	0.807
HR21	I am guided to produce quality products (goods or services).	3.65	0.721
HR22	I reflect on myself after making a decision.	3.63	0.746
HR23	I am clear with my goal of being at work.	3.76	0.828
HR24	I feel safe when I am at work.	3.74	0.767
HR25	I apply two-way communication (Example: Unit Leader receives the views of subordinates).	3.79	0.854
HR26	I am believed to be successful in performing tasks because of my competence.	3.36	0.789
HR27	I was supported by the Unit Leader to make changes.	3.46	0.617
HR28	My colleagues and I are welcomed to share improvement ideas with the Unit Leader.	3.39	0.692
HR29	I am appreciated for sharing any idea of improvements.	3.48	0.634
HR30	I easily got commitment from the Unit Leader.	3.59	0.636

Bartlett’s Test and KMO Result

Researcher used Principal Component Analysis (PCA) as extraction method and Varimax as rotation method. Table 4 presented the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy indicates more than 0.6 value which is 0.936. The Bartlett’s Test of Sphericity indicates significant (0.000).

Table 4: The KMO and Bartlett’s Test Score

KMO and Bartlett’s Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.936	
Bartlett's Test of Sphericity	Approx. Chi-Square	3459.165
	Df	435
	Sig.	.000

The EFA procedure also identified the number of components that developed for the items. This EFA procedure will group items that measure a similar component. Figure 1 indicates graph of five components that developed for the 30 items measuring Human Resource Management Practice (HRM) into five individual components.

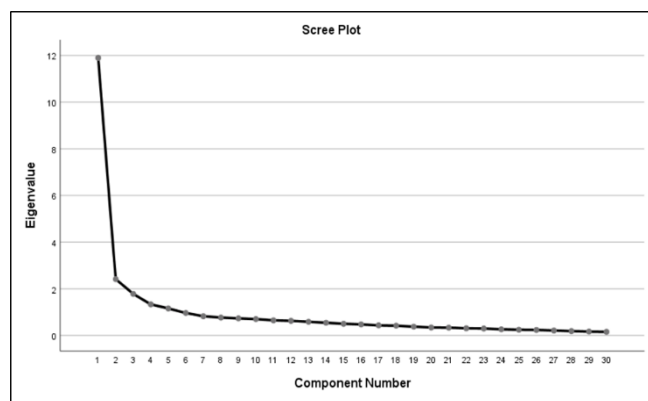


Fig 1: The Scree Plot for Human Resource Management Practice (HRM) Construct

Table 5 shows five components that developed with Eigenvalue greater than 1.0 from the EFA. The eigenvalues ranged between 2.959 and 5.361. The total variance explained for component 1 is 17.871%, component 2 is 13.841%, component 3 is 10.473%, component 4 is 10.473% and component 5 is 9.865%. To measure this construct, the total variance explained is 61.968%, which is acceptable since it exceeded the minimum 60% (Shkeer *et al.*, 2019) [44].

Table 5: Total Variance Explained for every component

Component	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	5.361	17.871	17.871
2	4.152	13.841	31.712
3	3.142	10.473	42.185
4	2.976	9.919	52.104
5	2.959	9.865	61.968

Extraction Method: Principal Component Analysis

Table 6 shows the EFA to explore items that measure Human Resource Management Practice (HRM) that demonstrated five components. In order to retain the item, the factor loading for each item should be more than 0.6. The item that contributes low factor loading has been removed (Awang,

2012). Component 1 subsists of eight items, component 2 subsist of six items, component 3 subsist of four items, component 4 with four items and component 5 with three items. 25 items were able to be maintained from the total of 30 items.

Table 6: The Rotated Component Matrix for Human Resource Management Practice (HRM) Construct

Item Code	Rotated Component Matrix				
	Component				
	1	2	3	4	5
HR21		0.646			
HR22		0.692			
HR23		0.699			
HR24		0.738			
HR25		0.681			
HR26		0.620			
HR11	0.774				
HR12	0.763				
HR13	0.702				
HR14	0.690				
HR15	0.729				
HR16	0.738				
HR17	0.747				
HR18	0.739				
HR31			0.822		
HR32			0.767		
HR33			0.708		
HR34			0.703		
HR51					0.775
HR52					0.757
HR53					0.747
HR41				0.710	
HR42				0.656	
HR43				0.696	
HR44				0.604	

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
 a. Rotation converged in 6 iterations.

Findings for the field study

Confirmatory factor analysis (CFA)

Researcher produced field research questionnaire using the result from EFA procedure. The field research questionnaire for Human Resource Management Practice (HRM) has been developed based on five components with 25 items. The first component is Staff Competency Development consists of eight items, Strategic Leadership is the second component consists of six items, component 3 has been renamed as Knowledge Development that consists of four items, component 4 is Organizational Culture has four items and component 5 is Communication with three items. Researcher distributed the questionnaire to randomly 313 employees for the field study.

The measurement model for Human Resource Management Practice (HRM) has been categorized as a second-order construct that represent five components has been validated. Researcher used IBM-SPSS-AMOS 25.0 to analyse the CFA procedure. The MLE method is fast, efficient and accurate (Awang, 2015; Awang *et al.*, 2018). Figure 2 portrays the CFA results for Human Resource Management Practice (HRM) Construct. The HRM construct has five components. The first component HRMC1 indicates Staff Competency Development, the second component HRMC2 indicates Strategic Leadership, the third component HRMC3 indicates

Knowledge Development, the fourth component HRMC4 indicates Organizational Culture and the fifth component HRMC5 indicates Communication.

Hair, Black, Babin & Anderson (2019) [20] recommended to observe the construct validity and reliability of the model prior proceeding with the structural model once the requirements of the measurement model fit had been met. The measurement model of latent constructs requires to pass

validity assessment which are Construct Validity, Convergent Validity, and Discriminant Validity (Hair *et al.*, 2011) [21]. The Construct Validity is measured via the Fitness Indexes of the Measurement Model. The Convergent Validity is identified via calculating the Average Variance Extracted (AVE), and Discriminant Validity is measured via producing the Discriminant Validity Index Summary.

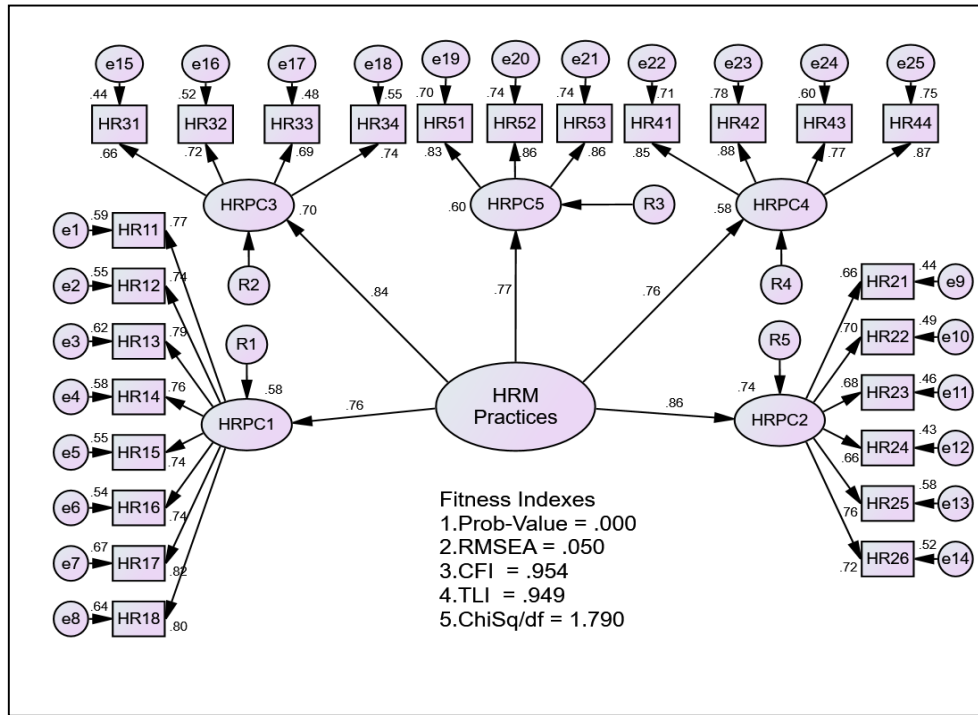


Fig 2: The CFA Results for Human Resource Management Practice (HRM) Construct

Construct Validity Assessment

Construct validity is measured via the fitness indexes (Awang *et al.*, 2018), There are three fitness indexes to be met which are Absolute Fit, Incremental Fit, and Parsimonious Fit.

Figure 2 shows the CFA Results for Human Resource Management Practice (HRM) Construct and Table 7 shows the assessment of construct validity.

Table 7: Construct Validity Assessment

Construct Validity	Name of Category	Name of Index	Level of Acceptance	Index Value	Results
Construct Validity	Absolute Fit	RMSEA	< 0.08	0.05	Met the value
	Incremental Fit	CFI	> 0.9	0.954	Met the value
	Parsimonious Fit	Chisq/df	< 3.0	1.790	Met the value
	The measurement model of Human Resource Management Practice (HRM) has met the value for Construct Validity				

Since Table 7 shows the fitness indexes value met the assessment of construct validity, therefore, researcher highlighted the Human Resource Management Practice (HRM) is a valid construct. Factor loading for each item has

been used to calculate the convergent validity and composite reliability upon the CFA. Table 8 shows component, items, factor loading for every item, composite reliability (CR) and average variance extracted (AVE).

Table 8: The Composite Reliability, Convergent Validity and Discriminant Validity

Construct	Item	Factor Loading	CR (Above 0.6)	AVE (Above 0.5)	√AVE	Convergent Validity
HRM	HRMC1	0.76	0.901	0.645	0.803	Yes
	HRMC2	0.86				
	HPPC3	0.84				
	HRMC4	0.78				
	HRMC5	0.77				
HRMC1	HR11	0.77	0.922	0.599	0.774	Yes
	HR12	0.74				

	HR13	0.79				
	HR14	0.78				
	HR15	0.74				
	HR16	0.74				
	HR17	0.82				
	HR18	0.80				
HRMC2	HR21	0.66	0.874	0.537	0.733	Yes
	HR22	0.70				
	HR23	0.68				
	HR24	0.86				
	HR25	0.76				
	HR26	0.72				
HRMC3	HR31	0.66	0.819	0.531	0.729	Yes
	HR32	0.72				
	HR33	0.79				
	HR34	0.74				
HRMC4	HR41	0.85	0.908	0.712	0.844	Yes
	HR42	0.88				
	HR43	0.77				
	HR44	0.87				
HRMC5	HR51	0.83	0.887	0.723	0.849	Yes
	HR52	0.86				
	HR53	0.86				

Table 8 shows the result of composite reliability and convergent validity for Human Resource Management Practice (HRM) construct. Result shows the CR value are greater than 0.6 while AVE value is greater than 0.5 (Shkeer *et al.*, 2019) [44]. Therefore, this research indicates the convergent validity and composite reliability for Human Resource Management Practice (HRM) construct have been met. Researcher also assess the Discriminant Validity. Researcher assess the correlation intensity between the five components of Human Resource Management Practice (HRM). The discriminant validity for the Human Resource Management Practice (HRM) construct is met if the coefficient of relationship between the components does not exceed 0.85 (Noor, Aziz, Mostapa & Awang, 2015).

Normality of the Items Assessment

Researcher also assess the dissemination of items that measure the Human Resource Management Practice (HRM) Construct. Table 9 shows assessment of normality of the items. The assessment of normality of the items has been made using the skewness of the distribution. Awang (2015) highlighted the skewness values for all items should fall between -1.5 to 1.5 for the data to be accepted as normal distribution. This indicates the distribution of data does not exit from normality distribution. The assessment of normality of the items in Table 9 indicates the skewness values fall within the range between -1.5 to 1.5; hence this research can conclude that the distribution of the items that measure the Human Resource Management Practice (HRM) construct has met the normality assumption of parametric statistical analysis.

Table 9: The Assessment of normality of the Items

Variable	min	max	skew	c.r.	kurtosis	c.r.
HRMC1	2.000	5.000	-0.358	-2.585	.440	1.587
HRMC2	2.000	5.000	-0.024	-0.175	-.325	-1.173
HRMC3	2.000	5.000	-1.152	-1.101	-.300	-1.082
HRMC4	2.000	5.000	-1.102	-0.738	-.406	-1.466
HRMC5	2.000	5.000	-1.128	-0.926	-.103	-.372

5. Conclusion and Future Works

This research has examined components and items that measure the Human Resource Management Practice (HRM) construct. The newly developed items have been gone through expert validation, pilot testing for EFA and field research for CFA. Researcher conducted the face validity and content validity to validate the pilot research instruments. The KMO measure of sampling adequacy, Bartlett’s Test of sphericity and Cronbach’s Alpha for internal reliability have achieved the required level. The CFA assessed the construct validity, convergent validity, discriminant validity, composite reliability and normality of items. Therefore, this research is able to refined and validated the instruments to measure the Human Resource Management Practice (HRM) construct for future research use. Besides, the CFA validated and confirmed the instrument is reliable to measure HRM

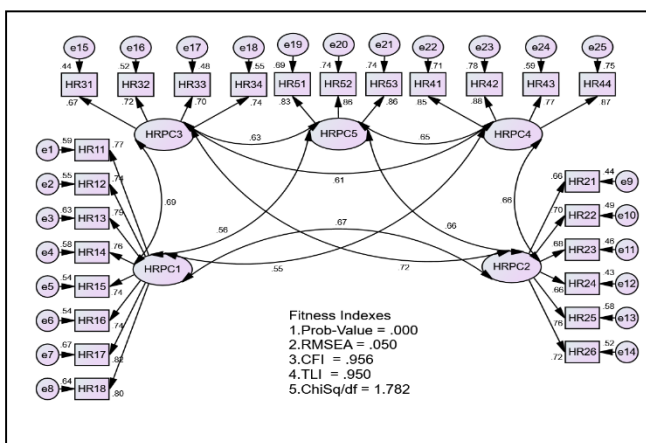


Fig 3: The Assessment of Discriminant Validity for Human Resource Management Practice (HRM) Construct

Figure 3 shows the assessment of Discriminant Validity for Human Resource Management Practice (HRM) Construct. Researcher uses IBM-SPSS-AMOS to analyse the relationship between all five components. The results show the correlation value is not more than 0.85 between all five components. Hence, this research can conclude that the measurement model for Human Resource Management Practice (HRM) construct has met the discriminant validity.

components by applying HRM Model to be used in future research especially in Malaysia context.

6. Limitation of Study

The current research faced constraint that might affect its results of the research context. Firstly, this research has been conducted in telecommunication segment, will make the outcome limited to the telecommunication sector in Malaysia by selecting the permanent non-executive and executive level who hold Assistant Manager, Manager and Assistant General Manager positions from GNT division, TM. This research was not was not conducted in different divisions and segment. Secondly, the security rule in TM restricted to assess information. The survey questionnaire distribution was done through internal email via coordination and monitoring from HCBDB team. Thirdly, the quantitative and cross-sectional approach is a limitation, therefore, the multi method or longitudinal approach is recommended to be conducted in future research in the future in order to obtain more impactful and valuable results. Interviews or focus groups method and approach would help to analyse the knowledge getting from the sample size because these methods can explore deeply into people's minds and get in-depth insight towards the research objective.

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