THE IMPACT OF TALENT COMPETENCE AND HUMAN RESOURCE MANAGEMENT PRACTICES ON INDIVIDUAL WORK PERFORMANCE THROUGH EMPLOYEE ENGAGEMENT

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DEDICATION

This thesis is dedicated to the people that I love for giving me continuous support and encouragement. No matter how hard I work, I will not be successful without the help of Allah. All praise be to Allah S.W.T

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In the name of Allah, the Almighty God, the Most Merciful, the Most Compassionate, all praise be to Allah and peace upon to Prophet Muhammad as His final messenger. First and foremost, I would like to extend my gratefulness to Allah s.w.t for giving me His blessing, strength, guidance, health, wisdom and enabling me to complete this journey.

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ABSTRACT

The rate of productivity per employee in Malaysia manufacturing sector has declined by 6.9 percent in 2016. If this situation left unchecked, it may impact negatively on the organizational productivity. In view of the national agenda to increase productivity per employee in Malaysia manufacturing industry, organizations should identify significant drivers to boost individual work performance, initiate their plan and continuously play a critical role in preparing the employees for future demand. Thus, this research examined the impact of talent competence and human resource management practices on individual work performance through employee engagement. Based on the Self-Determination Theory (SDT), Social Exchange Theory (SET) and literature, a total of seventeen hypotheses have been generated to be tested. The questionnaire comprises of four main research variables namely talent competence, and human resource management practices as independent variables, whereas, employee engagement as mediating variable, and individual work performance as dependent variables, which was adapted from seven scholars. A total of 400 questionnaires were distributed to the employees who were in executive and managerial levels at selected manufacturing organizations in Klang Valley area, and 252 completed questionnaires were used for analysis. Smart Partial Least Square (SmartPLS) version 3.2.7 and IBM SPSS Statistics version 24 statistical software were used in the analysis. The finding revealed that there was a positive and significant relationship between talent competence and human resource management practices towards individual work performance. Additionally, employee engagement showed a significant role in mediating the relationship between the talent competence, human resource management practices as independent variables and individual work performance as dependent variables. In brief, this research contributed in adding a new variable which is the talent competence in the model of Self-Determination Theory (SDT), advancing existing knowledge in the Social Exchange Theory (SET) and enhancing the understanding of organization in managing individual work performance more effectively.

ABSTRAK

Kadar produktivi bagi setiap pekerja di sektor pembuatan Malaysia telah menurun sebanyak 6.9 peratus pada tahun 2016. Sekiranya keadaan ini dibiarkan, ia akan memberi kesan negatif terhadap produktiviti mungkin Memandangkan agenda negara adalah untuk meningkatkan produktiviti setiap pekerja di industri pembuatan Malaysia, organisasi harus mengenal pasti pemacu yang signifikan untuk meningkatkan prestasi kerja pekerja, memulakan perancangan dengan segera dan terus memainkan peranan yang penting dalam menyediakan pekerja berdaya saing untuk permintaan masa depan. Oleh itu, kajian ini mengkaji kesan kecekapan bakat dan amalan pengurusan sumber manusia terhadap prestasi kerja individu melalui penglibatan pekerja. Berdasarkan Teori Penentuan Diri (SDT), Teori Pertukaran Sosial (SET) dan kajian literatur yang lalu, sebanyak tujuh belas hipotesis telah dihasilkan untuk diuji. Soal selidik untuk kajian ini terdiri daripada empat pemboleh ubah utama iaitu kecekapan bakat dan amalan pengurusan sumber manusia sebagai pemboleh ubah bebas, manakala penglibatan pekerja sebagai pemboleh ubah pengantara dan prestasi kerja individu sebagai pemboleh ubah bersandar yang diadaptasi dari tujuh pakar rujuk. Sebanyak 400 borang soal selidik diedarkan kepada pekerja yang berada di peringkat eksekutif dan pengurusan di organisasi pembuatan yang terpilih di kawasan Lembah Klang, dan 252 borang soal selidik yang lengkap telah digunakan untuk analisis. Perisian Smart Partial Least Square (SmartPLS) versi 3.2.7 dan perisian Statistik SPSS IBM versi 24 digunakan untuk menganalisis data. Hasil kajian menunjukkan bahawa terdapat hubungan positif dan signifikan antara kecekapan bakat dan amalan pengurusan sumber manusia terhadap prestasi kerja individu. Di samping itu, penglibatan pekerja menunjukkan peranan yang signifikan sebagai pengantara antara hubungan kecekapan bakat, amalan pengurusan sumber manusia sebagai pemboleh ubah bebas dan prestasi kerja individu sebagai pemboleh ubah bersandar. Kesimpulannya, kajian ini telah menyumbang kepada penambahan pemboleh ubah yang baru iaitu kecekapan bakat dalam model Teori Penentuan Diri (SDT), meningkatkan pengetahuan dalam Teori Pertukaran Sosial (SET) dan meningkatkan pemahaman organisasi dalam mengurus prestasi kerja individu dengan lebih berkesan.

TABLE OF CONTENTS

	TITLE	PAGE
DEC	CLARATION	iii
DED	ICATION	iv
ACK	NOWLEDGEMENT	v
ABS'	TRACT	vi
ABS	TRAK	vii
TAB	LE OF CONTENTS	viii
LIST	T OF TABLES	xiv
LIST	T OF FIGURES	xvii
LIST	T OF ABBREVIATIONS	xviii
LIST	T OF APPENDICES	xix
CHAPTER 1	INTRODUCTION	1
1.1	Introduction	1
1.2	Background of Study	2
	1.2.1 Contextual Background	2
	1.2.2 Theoretical Background	6
1.3	Problem Statement	8
1.4	Purpose of Study	11
1.5	Research Objectives	12
1.6	Research Questions	13
1.7	Research Significance	13
	1.7.1 Body of Knowledge	14
	1.7.2 Practical Significance	14
1.8	Scope of the Study	15
1.9	Limitation of Study	16
1.10	Definition of Terms	16
1.11	Thesis Organization	19
1.12	Summary of Chapter	21

CHAPTER 2	LITE	RATURE REVIEW	23
2.1	Introd	luction	23
2.2	Overv	view of the Main Research Variables	23
	2.2.1	Talent	24
	2.2.2	Talent Competence	24
		2.2.2.1 Learning Agility	26
		2.2.2.2 Leadership Spirit	27
	2.2.3	Human Resource Management Practices	29
		2.2.3.1 Recruitment and Selection	30
		2.2.3.2 Training and Development	31
		2.2.3.3 Compensation and Benefits	32
	2.2.4	Employee Engagement	34
		2.2.4.1 Job Engagement	36
		2.2.4.2 Organization Engagement	37
	2.2.5	Individual Work Performance	39
		2.2.5.1 Task Performance	41
		2.2.5.2 Contextual Performance	42
2.3	Under	rpinning Theories	44
	2.3.1	Self-Determination Theory (SDT)	44
	2.3.2	Social Exchange Theory (SET)	47
2.4	Previo	ous Studies and Hypotheses Development	49
	2.4.1	Talent Competence and Individual Work Performance	49
	2.4.2	Human Resource Management Practices and Individual Work Performance	54
	2.4.3	Talent Competence and Employee Engagement	60
	2.4.4	Human Resource Management Practices and Employee Engagement	62
	2.4.5	Employee Engagement and Individual Work Performance	67
	2.4.6	Talent Competence, Employee Engagement and Individual Work Performance	71

	2.4.7 Human Resource Management Practices, Employee Engagement and Individual Work Performance	72
2.5	Hypotheses Generated for Research	76
2.6	The Gap in the Existing Knowledge	78
	2.6.1 Latent Variables (Theoretical Settings)	78
	2.6.2 Contextual Setting	79
	2.6.3 Industrial Setting	79
2.7	Conceptual Framework for Research	81
2.8	Summary of Chapter	85
CHAPTER 3	RESEARCH METHODOLOGY	87
3.1	Introduction	87
3.2	Research Philosophy	88
3.3	Quantitative Versus Qualitative Research Approach	91
3.4	Research Process	92
3.5	Research Design	95
3.6	Research Population	95
	3.6.1 Malaysia as Focus	95
	3.6.2 Manufacturing Industry	96
	3.6.3 Managers, Professional and Executives	96
3.7	Sampling Method and Size	97
3.8	Types of Data	100
	3.8.1 Primary Data	100
3.9	Research Instrument and Measurement	101
	3.9.1 Talent Competence	101
	3.9.2 Human Resource Management Practices	103
	3.9.3 Employee Engagement	105
	3.9.4 Individual Work Performance	107
3.1	Research Questionnaire	109
3.1	Research Instrument Validity and Reliability	111
	3.11.1 Research Instrument Validity	111
	3.11.2 Research Instrument Reliability	112

	3.12	Pilot S	tudy	112
	3.13	Data C	Collection	115
	3.14	Data A	analysis	117
		3.14.1	Descriptive Statistics Analysis	117
		3.14.2	Assessment of Normality	118
		3.14.3	Partial Least Squares Structural Equation Modeling (PLS-SEM)	118
		3.14.4	Reflective Versus Formative Constructs	122
	3.15	Summa	ary of Chapter	124
CHAPTE	R 4	DATA	ANALYSIS AND RESULTS	127
	4.1	Introdu	action	127
	4.2	Analys	sis of Survey Response	128
		4.2.1	Response Rate	128
		4.2.2	Organization's Profile	129
		4.2.3	Demographic Profile of Respondent Analysis	130
	4.3	Prelim: Measu	inary Data Analysis and Purification of res	133
		4.3.1	Missing Data Values	133
		4.3.2	Normality Test	134
		4.3.3	Outliers	137
		4.3.4	Common Method Variance (CMV)	138
	4.4	Descri	ptive Analysis of the Latent Constructs	141
	4.5	Resear	ch Model Analysis	144
		4.5.1	Evaluation of Measurement Model	144
	4.6	First O	order Measurement Model (Figure 4.2)	147
		4.6.1	Convergent Validity for First Order Construct	147
		4.6.2	Internal Consistency, (α, ρ_c)	153
		4.6.3	Discriminant Validity	154
	4.7	Second	d Order Measurement Model (Figure 4.4)	163
		4.7.1	Convergent Validity Second Order Measurement Model	163
		4.7.2	Internal Consistency Second Order Measurement Model, (α, ρ_c)	167

		4.7.3	Discriminant Validity Second Order Measurement Model	168
2	4.8	Structu 4.5)	ural Model Evaluation for Second Order (Figure	177
		4.8.1	Structural Model Evaluation on Collinearity Issues: Step 1	179
		4.8.2	Structural Model Evaluation on Significance and Relevance of the Structural Model Relationship: Step 2	184
		4.8.3	Structural Model Evaluation on the Level of R ² , Coefficient of Determination: Step 3	189
		4.8.4	Structural Model Evaluation on the Level of Effect Size, f ² : Step 4	190
		4.8.5	Structural Model Evaluation on the Predictive Relevance, Q ² : Step 5	192
		4.8.6	Structural Model Evaluation on the q ² effect size: Step 6	193
2	4.9	Mediat	tion Analysis	195
2	4.10	Summa	ary of Chapter	201
CHAPTER	. 5	DISCU	USSION AND CONCLUSION	205
	. 5 5.1	DISCU Introdu		205 205
4		Introdu	ary of the Research Objectives, Hypotheses and	
4	5.1	Introdu Summa Results	ary of the Research Objectives, Hypotheses and	205
4	5.1 5.2	Introdu Summa Results Discus	ary of the Research Objectives, Hypotheses and	205205
4	5.1 5.2	Summa Results Discus 5.3.1	ary of the Research Objectives, Hypotheses and so sion on Findings Research Objective 1: To Examine the Relationship between Talent Competence and	205205208
4	5.1 5.2	Introdu Summa Results Discus 5.3.1	ary of the Research Objectives, Hypotheses and so sion on Findings Research Objective 1: To Examine the Relationship between Talent Competence and Individual Work Performance Research Objective 2: To Examine the Relationship between Human Resource Management Practices and Individual Work	205205208208
4	5.1 5.2	Introdu Summa Results Discus 5.3.1 5.3.2	ary of the Research Objectives, Hypotheses and signs on Findings Research Objective 1: To Examine the Relationship between Talent Competence and Individual Work Performance Research Objective 2: To Examine the Relationship between Human Resource Management Practices and Individual Work Performance Research Objective 3: To Examine the Relationship between Talent Competence and	205205208208210

LIST OF PUBLI	CATIONS	267
REFERENCES		229
5.8	Conclusion	227
5.7	Recommendation for Future Research	227
5.6	Limitation of Study	226
	5.5.2 Practice	224
	5.5.1 Body of Knowledge	223
5.5	Contribution of Study	223
5.4	Implication of Study	222
	5.3.7 Research Objective 7: To Examine the Role of Employee Engagement in Mediating between Human Resource Management Practices and Individual Work Performance	220
	5.3.6 Research Objective 6: To Examine the Role of Employee Engagement in Mediating Between Talent Competence and Individual Work Performance	219
	Relationship between Employee Engagement and Individual Work Performance	216

LIST OF TABLES

TABLE NO.	TITLE	PAGE
Table 1.1	List of objectives for this research	12
Table 1.2	List of research questions for this research	13
Table 2.1	Past work of literature by previous scholars related to talent competence	28
Table 2.2	Past work of literature by previous scholars related to human resource management practices	33
Table 2.3	Past work of literature by previous scholars related to employee engagement	38
Table 2.4	Past work of literature by previous scholars related to individual work performance	43
Table 2.5	List of hypotheses	77
Table 3.1	Comparison of five research philosophies interpretation by (Saunders et al. 2019)	89
Table 3.2	Category of Occupation, Report on Survey of Manufacturing Industries (2015), Department of Statistics Malaysia	96
Table 3.3	Determining sample size by Krejcie and Morgan (1970)	98
Table 3.4	Measurement items for talent competence	101
Table 3.5	Measurement items for human resource management practices	103
Table 3.6	Measurement items for employee engagement	106
Table 3.7	Measurement items for individual work performance	107
Table 3.8	Components of questionnaire	110
Table 3.9	Reasons for conducting pilot study	113
Table 3.10	Number of respondents in pilot study	113
Table 3.11	Cronbach's alpha value for pilot study	115
Table 3.12	Rule of thumb for selecting CB-SEM or PLS-SEM, (Hair et al., 2011)	120
Table 3.13	Guideline for choosing measurement model	123

Table 3.14	Reflective second order and reflective first order construct	124
Table 4.1	Response rate for this research	128
Table 4.2	Response rate from manufacturing respondents	128
Table 4.3	Summary of organizations profile	129
Table 4.4	Summary of respondent's profile	130
Table 4.5	Missing data value summary	134
Table 4.6	Assessment of normality procedure result	135
Table 4.7	Summary result for Harman's single factor analysis	139
Table 4.8	Summary of descriptive analysis of latent constructs	142
Table 4.9	Outer loading value for first order measurement model	149
Table 4.10	Average variance extracted score first order measurement model (before)	151
Table 4.11	Average variance extracted score first order measurement model (after)	152
Table 4.12	Cronbach's alpha and composite reliability value	153
Table 4.13	Fornell and Larcker discriminant validity for first order measurement model	156
Table 4.14	Cross-Loading discriminant assessment for first order measurement model	157
Table 4.15	HTMT inference discriminant assessment for first order measurement	160
Table 4.16	Outer loading value for second order reflective measurement model	164
Table 4.17	Average variance extracted score second order reflective measurement model	166
Table 4.18	Cronbach's alpha and composite reliability value second order measurement model	167
Table 4.19	Fornell and Larcker discriminant validity for second order reflective measurement model	170
Table 4.20	Cross-Loading discriminant assessment for second order reflective measurement model	170
Table 4.21	HTMT inference discriminant assessment for second order reflective measurement model	173
Table 4.22	Summary of outer value VIF among four latent constructs	179

Table 4.23	Summary of VIF inner value	182
Table 4.24	Summary of significance and relevance of structural model relationship	185
Table 4.25	Summary coefficient of determination, R ²	189
Table 4.26	Summary assessment for the level of effect size,f ²	191
Table 4.27	Summary assessment of the predictive relevance, Q^2	192
Table 4.28	Summary of blindfolding result from talent competence deletion	193
Table 4.29	Summary of blindfolding result from human resource management deletion	194
Table 4.30	Indirect effect result by bootstrapping procedure	197
Table 4.31	Indirect effect result by bootstrapping procedure and confidence interval bias result	197
Table 4.32	Summary of mediation analysis findings	198
Table 4.33	Summary of mediation type and VAF assessment indirect effect of structural model	199
Table 4.34	Summary result on the structural model hypothesis relationship testing	202
Table 5.1	Research objectives, hypotheses and results	205

LIST OF FIGURES

FIGURE NO	. TITLE	PAGE
Figure 1.1	Perception of employees on skills and competencies across 33 countries (Randstad, 2017)	5
Figure 2.1	Self-Determination Model of Flow adapted from (Bakker and Van Woerkom, 2017, page 52)	45
Figure 2.2	Summary of existing knowledge gaps	81
Figure 2.3	Conceptual framework for this research	84
Figure 3.1	Detail research activities flow chart adapted from (Saunders et al., 2019)	94
Figure 3.2	G-Power analysis result	99
Figure 3.3	Mediation model	120
Figure 3.4	Diagram of reflective and formative model, (Ramayah et al., 2018)	122
Figure 4.1	Reflective measurement model adapted from (Ramayah et al., 2018)	145
Figure 4.2	First order measurement model	146
Figure 4.3	Outer loading value	148
Figure 4.4	Second order measurement model	162
Figure 4.5	Structural Model Assessment for Main Latent Variables	175
Figure 4.6	Structural Model Assessment for First Order Constructs	176
Figure 4.7	Stages involves from measurement model assessment and structural model assessment	177
Figure 4.8	Six steps for assessing the structural model adapted from, (Hair et al., 2017)	178
Figure 4.9	Illustration of simple mediation model between independent and dependent variables adapted from (Preacher and Hayes, 2008)	196

LIST OF ABBREVIATIONS

TC - Talent Competence

HRM - Human Resource Management

EE - Employee Engagement

IWP - Individual Work Performance

PLS - Partial Least Square

SEM - Structural Equation Model

LIST OF APPENDICES

APPENDIX	TITLE	PAGE
Appendix A	Compilation of replied consent	251
Appendix B	Questionnaire	254
Appendix C	Content validation expert	262
Appendix D	Permission to collect data	263
Appendix E	Sample rubric for expert validation	264

CHAPTER 1

INTRODUCTION

1.1 Introduction

In chapter one, an introductory for this research will be presented. Besides that, this chapter also will provide the background of the study and relevant information pertaining to the current issues in this field of study. The following section explains on the problem statement for this study. The problem statement section shall outlined a clear description of issues regarding a statement of the problem that has been identified for this research. After that, this study shall proceed with the statement of research objectives. There are a total of seven research objectives that have been presented and listed in this research. The following section will outline the research questions, which consist of seven research questions for this study. The next section shall be the research hypotheses. Subsequently, the chapter proceeds with the section on significance and scope of this research. The significance of this study emphasized on the contribution towards the body of knowledge and to the practical implication. Whereas, the scope of the study explained by the participation of respondents, the location setting and the industrial setting. This shall be followed by the limitations of the study and definition of terms. Additionally, in this research also there exists four main latent constructs which consist of talent competence, human resource management practices, employee engagement and individual work performance. Therefore, these four latent constructs will be defined in the last section in this introductory section. The following section will describe and explain the details for this research.

1.2 Background of Study

The background of this study exits in two parts: in subsection 1.2.1 as contextual background and in subsection 1.2.2 as a theoretical background.

1.2.1 Contextual Background

In a healthy economy, economic growth always stands as one of the most crucial indicators for a country's success. Over the course of centuries, Malaysia witnessed the tumultuous evolution of manufacturing industries both at home and across the globe. Significantly, these manufacturing industry became one of the main industrial key players to expedite economic growth. Therefore, through most of these years, Malaysia has acknowledged the contribution of manufacturing industries and so this industry have been viewed as the bellwethers of Malaysia's economy. The Prime Minister of Malaysia, YAB Tun Dr, Mahathir Bin Mohamad stated that the manufacturing sector has played an important role in turning Malaysia into a trading nation and the sector is constantly infusing dynamic process improvement. However, the Prime Minister has cautioned that without knowledge of application, the improvement is meaningless, (National Policy on Industry 4.0, 2018).

Comparatively to the global position, the Malaysian manufacturing industry's total labour productivity is ranked in 44th position and this rank has remained static since the year 2009 (National Policy on Industry 4.0, 2018). In the same report, the relative share for high skilled labour indicates a declined rate from 19 percent in 2010 to 18 percent in 2017. In short, this situation may lead to declination of overall industry competitiveness. Meanwhile, there is a recent report which could help the industry to project its future readiness. Specifically, the report revealed the readiness for future production among 100 countries, (World Economic Forum, 2018). Malaysia is positioned at the 'leader' quadrant and despite the strong manufacturing position among 100 countries, it is claimed that the economy is at stake if the country does not accelerate its transformation, (World Economic Forum, 2018).

In the same report, it is highlighted that the global leader countries such as China, Switzerland, Germany, Republic of Korea and Japan are moving aggressively and rapidly in their implementation. The fact of the matter is that many organizations are now developing complex structures and processes to continuously spark their performance. The changing of current markets and advancements on new technologies will create a demand for talent which can adapt quickly and repeatedly to new processes and environments.

Talent becomes a potentially powerful source of competitive advantage in today's global business environment. Given the economic constraints faced by organizations, there is a need to efficiently manage potential talent, by "working smarter" to ensure the return on investment is worthwhile. In today's competitive knowledge-based world, managing employees become the fundamental building block to create an organization that is capable of changing, innovating and learning as well as to execute new processes. Most of the organizations are aware that these talented employees are their most critical asset in driving productivity excellence (Skorková, 2016). Primarily, it is highlighted that undoubtedly the performance from individual employee contributes towards the organization's success and growth, which helps the organization to remain competitive in the industry for a long period (Anitha, 2014; Anvari, Soltani, and Rafiee, 2016; Gallardo-Gallardo, Dries, and González-Cruz, 2013; Kwame Mensah, 2015; Nangov, Sasmoko, and Indrianti, 2018; Pahos and Galanaki, 2018; Rai, Ghosh, Chauhan, and Singh, 2018; Velciu, 2017; Vosloban, 2013).

Having pool of qualified workforce will not only helps the industry and organizations to survive for the long term, but also maintain the consistency of individual performance for generating high qualities of productivity, (Diamantidis and Chatzoglou, 2019). It is also has been postulated that work performance of an employee will not only contributed to the overall performance, but also will be able to meet the objectives and goals of the organizations, (Sujatha and Krishnaveni, 2018). Likewise, Alagaraja and Shuck (2015) believed that a new linkage towards performance at the individual level is a new dimension worthy of investigation. Generally, there are several aspects which have significant consequences towards

performance at individual levels such as benefits, developmental programs, support provided by organization and others. This will later provide positive improvements in performance and profitability within the organizations (Ahmad, Farrukh, and Nazir, 2015).

Essentially, individual work performance evaluation practices are important to help an organization in distinguishing between good performers or underperform employees and achieving standardization of a desirable performance (Diamantidis and Chatzoglou, 2019). Individual work performance refers to an action or behavioural that are relevant to the goals of the organization (Campbell, 1990). The main focus of individual work performance is towards one's behaviour or action of an individual employee (Koopmans et al., 2012). In essence, the performance of each individual employee should be aligned with organizational policies or goal, as to ensure the process more strategically implemented (Jena and Pradhan, 2014; London, 2003; Mone and London; 2009). Therefore, individual work performance in the manufacturing industry should be enhanced to increase the organization's odds of survival through future revolutions, especially in manufacturing industries.

The rationality of the present study has enlightened to acknowledge the contribution of competence at the individual level as one of the drivers to boost performance (Le Deist and Winterton, 2005; Meyer et al., 2015). Therefore, relevant approaches such as aligning the competence of individual talent to increase performance level might be an predictor for individual work performance. Meanwhile, the managing director of Kelly Services, Mrs. Melissa Norman, has said that due to globalization, a majority of business conditions and climates have becomes uncertain, leading to situation which encourages hiring skilled talent (Kelly Services Inc, 2012). The Hays Group further claims that the manufacturing industries in Malaysia have retained their demands to have employees that possess strong leadership and willingness to train others (Hays Asia, 2018).

Meanwhile, the Workmonitor's Q3 Global presented the report of employee perception on skill and competencies among 33 countries from the regions of Europe, the Americas and Asia Pacific including Malaysia. The results revealed that

96 percent of Malaysia employees believed that refreshing their skills and competencies will enhance their employability and globally 90 percent of employee agreed with this statement. Thus, the employees globally have realized that a desirable set of competencies and skill set will attract the attention of employers. This is because a set of desirable competence level not only helps in increasing individual performance but also has an impact on the overall organization's productivity. Figure 1.1 below illustrated the agreement across countries by (Randstad, 2017).

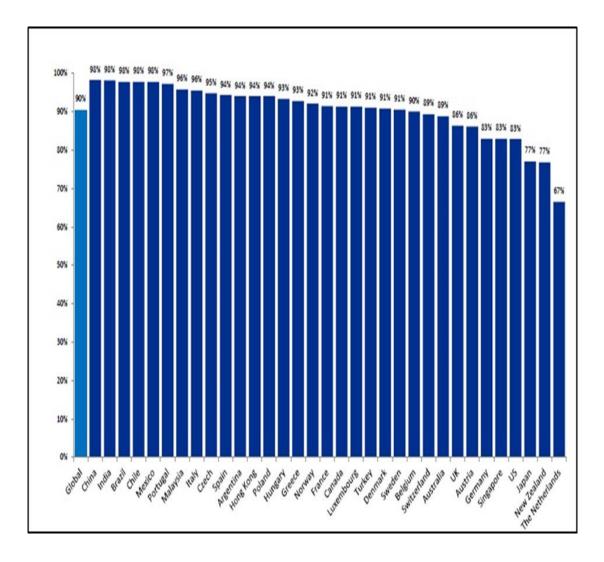


Figure 1.1 Perception of employees on skills and competencies across 33 countries (Randstad, 2017)

1.2.2 Theoretical Background

The conceptualization of competence has been interchangeably used with 'competency' (Cheng, Dainty and Moore, 2003). Competence refers to a person and represents a set of attributes which change over a time as the individual employee growth or develop (Lester, 2014). However, it has been noticed that there is a lack of attention on studies related to sustain improvement in areas of competence which lead to outstanding performance, (Richard, 2008).

Apart from talent competence, this research also examines human resource management practices as one of the drivers in achieving an outstanding individual work performance. Regardless of size or industry, highly talented employees are likely to underperform when they feel underdeveloped, underpaid or undervalued. The decline of individual performance could create a reduction in productivity and represent a loss of investment on an organization's human capital resources.

According to Koh (2003), although most of the research investigates the specific aspect of managing talent, they often neglect to focus on the issues of human resource management. Therefore, organizations worldwide must able to manage their talent effectively in order to win the war of talent. Additionally, due to the high competition among companies to hire the right talent, there is also demand for human resource professionals to focus on an area such as compensation and benefits, learning and development, and recruitment and selection. Hays Group conducted the sequence of navigating Asia's changing workforce in which five countries participated namely Mainland China, Hong Kong, Japan, Malaysia and Singapore (Hays Asia, 2018). It was revealed that employees in the Malaysian manufacturing industry have been searching for better salary package. Whereas, the same publisher has recently also revealed a report on understanding Asia's talent and strategizing for the future (Hays Asia, 2019). The respondents in Malaysia manufacturing report a demand for attractive compensation and benefits packages alongside with training and development (Hays Asia, 2019). Although there are numerous studies investigating human resource management practices with performance, there is little

empirical evidence of research targeted towards individual research performance (Jaskiene, 2015).

Human resource management refers to the management function, which involves in recruiting, selecting, training, developing employees and as a process of getting efficiently the use of human resource to achieve the set goals (Ganesan, 2014). There are several practices of human resource management which have been identified by previous scholars these include recruitment, selection, compensation benefits, training and development and career development (Asfaw, Argaw, and Bayissa, 2015; Jouda, Ahmad, and Abed Dahleez, 2016; Long, Perumal, and Ajagbe, 2012). The underlying construct of human resource management practices have been developed in response to the needs of hiring, motivating and developing individual talent to fulfil each organization's need (Boxall, 2014). The linkage of human resource management practices with performance is highly dependable upon the response from employees towards their organization's human resource management practices and the impact direction would be based on the employee perception (Guest 2002). The various configuration of human resource management practices can be seen as the attempts made by an organization to influence performance at the individual level (Runhaar, 2017; Wright et al., 1999; Becker and Huselid, 2006) and it is theorized that the human resource management practices exist as the organizational activities that are mandated for managing the pool of human capital and ensuring this human capital fulfils the organization goals. Next, in this study, the researcher examined the role of employee engagement as a mediator.

Apart from the two main predictors, this research has also examined employee engagement as the mediator in achieving outstanding individual work performance. Therefore, organizations should ensure that their employees give a commitment, loyalty and higher focus on maximizing their performance. According to Shuck, Reio Jr, and Rocco (2011), the concept of engagement managed to draw attention because it was reported that high productivity will be achieved once employees are highly engaged. The conceptualization or terminology of employee engagement is well-defined in many forms but primarily focuses on a person's emotional commitment towards the organization, exhibits of discretionary effort in

their job, cognitive ability used to spend time for thinking on a given role and reflection on how individual employ themselves in the performance of their job (Saks, 2006; Baumruk, 2004; Richman, 2006). Employee engagement refers to the harnessing of organization members selves to their work role in engagement, people employ and express themselves physically, cognitively and emotionally during role performance, (Kahn, 1990). Additionally, there is a need to further examine employee engagement towards performance at the individual level, (Alagaraja and Shuck, 2015). With all this in view, the construct of employee engagement is claimed to be meaningful and worthy for future research, (Saks, 2006). Recognizing employee engagement as one of the drivers to increase performance at the individual level will help the talent to feel more connected, focus-minded, highly dedicated and motivated to go the extra miles in completing their job, (Menguc, Auh, Fisher, and Haddad, 2013).

This statement is similarly reinstated by Harter, Schmidt, and Hayes (2002) on the positivity of employee engagement towards satisfaction, loyalty, profitability and productivity. However, the research linkage still receives minimal attention which requires further examination (Jurgita, Ieva, and Rita, 2018). With all this taken into consideration, it is clear that the individual work performance in manufacturing industries should receive attentiveness to respond with future manufacturing revolution challenges with the adoption of talent competence and human resource management practices. To certify the victorious association of talent competence and human resource management practices towards individual work performance through employee engagement role, the relationship of each construct and the impact on individual work performance needs to be studied. Therefore, the next subsection will explain the problem statement for this research.

1.3 Problem Statement

The present research is conducted based on the contextual, conceptual and theoretical gaps. Firstly, a press statement from the Department of Statistics Malaysia on February 2016 revealed that the productivity per person decreased by 6.9 percent

and the overall performance of manufacturing sector also decreased to 2.4 percent (DOSM, 2016). Over and above that, the Annual Report 2017 from Bank Negara Malaysia has disclosed that the Gross Domestic Product (GDP) for the year of 2016 in the manufacturing industry has declined to 4.4 percent compared to 4.9 percent on the year of 2015 (BNM, 2017). Thirdly, under the national agenda, the baseline target is to increase the productivity per person in the manufacturing industry by 30 percent from RM106, 647 by the year of 2025 (National Policy on Industry 4.0, 2018). Analogically, this reflecting that individual employee work performance does contributed to the overall organization's performance. The importance of individual work performance has drew the attention of previous researchers in their study.

Fourth, several empirical studies have been carried out in different industrial contexts and location settings such as at the public sector in Romania (Ciobanu and Androniceanu, 2015), the public sector in Taiwan (Chen, Bian, and Hou, 2015), the manufacturing sector in Indonesia (Pawirosumarto, Sarjana, and Muchtar, 2017), the financial sector in Netherland (Koopmans et al., 2014), the manufacturing sector in South Korea (Nae, Moon, and Choi, 2015), the education sector in Iran (Dehaghi and Rouhani, 2014), the health sector in Canada (Fleury, Grenier, Bamvita, and Chiocchio, 2017), the manufacturing in India (Pradhan and Jena, 2017) and the education sector in China (Cao, Guo, Vogel, and Zhang, 2016). Whereas in the context of Malaysia, individual work performance related researches have taken place in multiple industrial settings such as the public sector (Fauzilah, Zaharah, Wan Amalina, and Nur Haizal, 2011), the education sector (Sheikh Khairuddin, 2015), the agriculture sector (Hayrol Azril et al., 2010), the hotel sector (Zakariah, Zainal, and Shariff, 2018) and across four sectors which are in the manufacturing, education, hospitality and health sectors (Kamaruddin, Omar, Shaladdin Muda, Saputra, and Ismail, 2017). Scare attention has been received by the manufacturing industry especially pertaining to individual work performance.

Although there are several local scholars whom have conducted study in Malaysia's manufacturing industry but there are differences in terms of individual work performance assessment, location settings and respondent's limitation. For example, research that has been carried out by Md. Amin and Abdul Majid (2017)

only focused in the northern part of Penang and the authors neglected task performance and behavioural constructs when assessing individual work performance among non-executives. Meanwhile, research conducted by Kamaruddin et al., (2017) lacked in the enrichment of data from manufacturing respondents and the respondents are only limited to female. While research conducted by Hee and Jing (2018) only focused on the manufacturing industry in the Southern area of Malaysia and the authors recommended future researcher to conduct research at the Malaysia central region.

Conceptually the assortment and interconnection of employee engagement towards individual work performance have been highlighted by (Anitha, 2014; Buil, Martinez and Matute, 2018; Soane et al., 2012). Besides that, the scholars stated that there are a small number of empirical studies had been done to examine the association of employee engagement and performance of the individual employee (Jurgita et al., 2018). In a study conducted by Kim, Kolb, and Kim (2013), the authors have reviewed 20 empirical studies relevant to the concept of employee engagement and performance of individual employee from out of 134 articles. They found that 11 studies have outlined direct or indirect association between employee engagement and employee performance. Meanwhile, seven studies have found that employee engagement mediates other variables and employee performance. All of the twenty researches were conducted in various location settings. Among them are United States, Netherlands, Italy, Australia, Ireland, United Kingdom, Pakistan, Greece, Portugal, China, Nigeria, Spain and Cameroon. However, most of the research focused on the educational sector, R&D sector, airline sector, fast food franchise, public sector and hotel sector. Due to the importance of employee engagement variable, this construct has gained attention and several past researchers have examined the role of employee engagement as mediator in their work such as (Alfes, Shantz, and Alahakone, 2016; Bedarkar and Pandita, 2014; Buil et al., 2018; Guan and Frenkel, 2018; Jurgita et al., 2018; Karatepe, 2013; Menguc et al., 2013; Nazir and Islam, 2017; Song et al., 2014). The role of employee engagement as a mediator might be appropriate in increasing the level of individual work performance.

In another perspective, the Self Determination Theory (SDT) is concerned with how a person interacts and it is depends on the social environment (Legault, 2019). Despite of this theory's importance which leads to a desirable performance, this theory receives minimal attention especially among local researchers. Others underpinning theories were used by previous researchers to respond to individual work performance such as expectancy theory and organization theory (Fauzilah et al., 2011; Zakariah et al., 2018). Meanwhile the viewpoint of Social Exchange Theory (SET) does not only influence the level of employee engagement but also produces good performance outcome (Yin, 2018). However, some local scholars have lacks explanation on how Social Exchange Theory influences employee engagement for instance the following work by (Nasurdin, Ling, and Khan, 2018; Rasli, Tat, Chin, and Khalaf, 2012). Therefore, the present research has identified the problem pertaining to declination of productivity per person, scarce attention given by researchers in the manufacturing industry in Malaysia, less explanation given from local scholars on Social Exchange Theory (SET), less adoption of Self-Determination Theory (SDT) in individual work performance and lastly, some of scholars neglecting the task and behavioural assessment in assessing individual work performance. Based on the contextual, conceptual and theoretical issues, this research attempts to examine whether the predictor of talent competence and human resource management practices impact significantly towards individual work performance mediated with the role of employee engagement.

1.4 Purpose of Study

The purpose of the study is to examine the impact of talent competence and human resource management practices towards individual work performance mediated by employee engagement among employees in executive and managerial level at Malaysia manufacturing industry.

1.5 Research Objectives

This section explained and presented the details of the seven objectives for this research. There are four main constructs namely talent competence, human resource management practices, employee engagement, and individual work performance. Table 1.1 below shows the statement of objective that has been established in this research.

Table 1.1 List of objectives for this research

No	Research Objectives
01	To examine the relationship between talent competence and individual
	work performance
O2	To examine the relationship between human resource management
	practices and individual work performance
О3	To examine the relationship between talent competence and employee
	engagement
O4	To examine the relationship between human resource management
	practices and employee engagement
O5	To examine the relationship between employee engagement and individual
	work performance
O6	To examine the mediating role of employee engagement between talent
	competence and individual work performance
O7	To examine the mediating role of employee engagement between human
	resource management practices and individual work performance

1.6 Research Questions

This section listed and presented the details of the research questions. There are four main constructs namely talent competence, human resource management practices, employee engagement and individual work performance. Table 1.2 below shows the list of research questions statement established in this research.

Table 1.2 List of research questions for this research

No	Research Questions
R1	Is there any relationship between talent competence and individual work
	performance?
R2	Is there any relationship between human resource management practices
	and individual work performance?
R3	Is there any relationship between talent competence and employee
	engagement?
R4	Is there any relationship between human resource management practices
	and employee engagement?
R5	Is there any relationship between employee engagement and individual
	work performance?
R6	Does employee engagement able to play mediating role between talent
	competence and individual work performance?
R7	Does employee engagement able to play mediating role between human
	resource management practices and individual work performance?

1.7 Research Significance

The main research purpose is to examine the impact of talent competence and human resource management practices on individual work performance. In addition, this research also examines the mediating role of employee engagement in mediating the relationship between talent competence and human resource management practices on individual work performance. Therefore, the findings for this research are expected to provide relevant research significance to the body of knowledge and practical standpoint.

1.7.1 Body of Knowledge

Firstly, the significance of this research to the body of knowledge will add and expand the cause-effect knowledge on existing human resource management studies. The enhancement of the current knowledge includes the other latent variable such as talent competence, employee engagement and individual work performance. Besides that, a new insight has been added to the existing Self-Determination Theory for the use of future researcher and academicians. The existing self-determination model of flow by Bakker and Van Woerkom (2017) has highlighted three sub domain in personal resources such as self-efficacy, optimism and resilience. Thus, in this research, the latent construct of talent competence add to the existing theoretical perspective as the personal resources domain.

1.7.2 Practical Significance

In the first place from the practical standpoint, this study will benefit to the manufacturing industry especially in Malaysia by strategizing to increase the performance at the individual level. Current and future issues specifically in individual work performance should receive great attention from the human resource practitioners, employers and organizations. The behavioural and task performance should not be neglected by organization when assessing individual work performance, as it may provide positive impact for overall productivity capacity. Secondly, the talent competence, human resource management practices and employee engagement might become a potential source for organizations in responding towards the work performance at the individual level.

Thirdly, this study also enables the policymakers to revise their existing policy. Therefore, the current key performance indicator at the individual level can be revised and the assessment of individual employee should include the competence level, effectiveness of human resource management practices and assessment of employee engagement level. Lastly, this study significantly acknowledges the contribution of talent competence and human resource management practices to increase the individual work performance in realizing the industrial goal to increase the performance per person by 30 percent in 2025 as highlighted by the National Policy on Industry 4.0, (2018). Additionally, the construct of employee engagement as a mediator is tested to see the significance in the relationship. Thus, assessing individual work performance regularly would help manufacturing industry in transforming successfully by 2025 according to the targeted goals.

1.8 Scope of the Study

This research examines the relationship of talent competence and human resource management practices on individual work performance mediated by employee engagement in the Malaysia's manufacturing industry. In addition, the first scope of the research attempts to collect the perception of employees in the executive and managerial level only. Therefore, only employees in the executive and managerial level are chosen to participate in this research. The second scope of this research only focuses on the manufacturing industry. There are four manufacturing organizations across four subsectors which are chemical-based manufacturer, leather goods and footwear manufacturer, reproduction of recorded media and goods manufacturer and pharmaceutical-based manufactures. They have have given their consent to participate in this research. The third scope of this research is the location settings. These organizations are mainly located only at the Klang Valley area (Kuala Lumpur and Selangor). Next scope is unit of analysis. This research focuses on the unit of analysis at an individual level among executive and managerial. Meanwhile, quantitative research approach is the fifth scope in this study. Last but not least, there are only four main variables used in this study namely talent competence, human

resource management practices, employee engagement and individual work performance.

1.9 Limitation of Study

All studies have limitations and there are three limitations have been found in this research. Firstly, the sample selected for this study was specifically for employees in the executive and managerial level at manufacturing who has been identified by their human resource department within the organization. Therefore, the result obtained in this research may have a limitation in the generalization of perception to other levels of employees and other industries. The second limitation is accessibility. During the data collection, the distribution of questionnaires are handed over to the human resource department. This is because only the human resource department has the authority and able to distribute to the targeted respondents. The third limitation, is the researcher facing difficulty in getting permission from some of the manufacturing organizations due to the confidentiality to disclose information related to individual work performance. Therefore, there are only four manufacturing organizations have given their consent to participate in this research. Thus, the details of the limitation for this study will be explained thoroughly in the Chapter 5.

1.10 Definition of Terms

Talent Competence

Gallardo-Gallardo et al., (2013) viewed talent as a select group of employees who demonstrate high levels of potential. The conceptualization of competence is believed belongs to a person and represent as their set of attributes that changing over a time as the individual employees growth or develop (Lester, 2014). The operational definition for talent competence is refers to employees who possess potential to occupy higher position in organization with strong leadership spirit and learning agility (Juhdi, Pa'wan, and Milah, 2012).

Learning Agility

For conceptual and operational definition, learning agility has been defined as the willingness and ability to learn new competencies from the past experience and consequently applying that learning to perform under first-time, tough or different conditions successfully (Lombardo, and Eichinger, 2000).

Leadership Spirit

For conceptual and operational definition, leadership spirit is defined as a leader that is motivating and inspiring employees through his or her strong vision (Smith, Minor, and Brashen, 2018).

Human Resource Management (HRM) Practices

Ganesan (2014) define human resource management as management function which involve in recruit, select, train, develop employees and as a process of getting efficiently the use of human resource to achieve the set goals. The operational definition for human resource management is refers to organizational activities which involves recruitment, selection, training, development, compensation and benefits (Fayez Hamed, Ramalu and Subramaniam, 2013).

Recruitment and Selection

For conceptual and operational definition, recruitment can be defined as the activities and practices that carried out by the organization as the fundamental step in attracting and identification of potential employees (Kianto, Sáenz, and Aramburu, 2017). Meanwhile, the selection is the step of prediction on selecting applicant that have the most possibility to succeed in that job position and best fit with the culture of the workplace (Torrington, Hall, Taylor and Atkinson, 2014).

Training and Development

For conceptual and operational definition, training and development can be defined as an attempt in filling the gaps needs of the individual to meet the knowledge and skills needed in performing their current job as well as for future needs (Ganesan, 2014).

Compensation and Benefits

For conceptual and operational definition, compensation and benefits is defined as the form of pay, incentives and benefits given to employees for performing the assigned job (Ganesan, 2014).

Employee Engagement

Employee engagement has been defined as the harnessing of organization members selves to their work role; in engagement, people employ and express themselves physically, cognitively and emotionally during role performance (Kahn, 1990). The operational definition for employee engagement is refer as the role specific with respect to one's job and organization (Saks, 2006).

Job Engagement

For conceptual and operational definition, job engagement is associated with the work-related task that has been defined as the existing of energetic connection between employees and their job (Schaufeli and Bakker, 2003).

Organization Engagement

For conceptual and operational definition, organization engagement can be define as the willingness to dedicate physical, cognitive and emotional resources to the organization and to one's work group or team (Saks and Gruman, 2014).

Individual Work Performance

Individual work performance was defined as the actions or behavioural that

are relevant to the goals of the organization (Campbell, 1990). The operational

definition for individual work performance is refer to the proficiency to which

individual perform the tasks of his or her job and exhibit good behaviour that support

the organization, social and psychological environment (Koopmans et al., 2014).

Task Performance

For conceptual and operational definition, Borman and Motowidlo (1993)

defined the task performance construct as the proficiency with which the job

incumbents perform activities, which are formally recognized as part of their jobs.

Contextual Performance

For conceptual and operational definition, contextual performance is defined

as the behaviour that affecting the organizational, social and psychological context,

where the work is performed (Borman and Motowidlo, 1993).

1.11 **Thesis Organization**

This section elaborates briefly the organization of thesis according to the five

chapters. There are a total of five chapters:

Chapter 1: Introduction (a)

(b)

Chapter 2 : Literature Review

(c)

Chapter 3: Research Methodology

(d)

Chapter 4 : Data Analysis and Results

19

(e) Chapter 5 : Discussion and Conclusion

Chapter 1 presented the introductory and foundation of the research. In this chapter, several subsections have been highlighted to provide detail of clarification. For example, the subsection includes the background of study, problem statement, research objectives, research questions, research hypotheses, the significance of study, scope of study, limitation of the study, definition of constructs terminology, organization of thesis and lastly the summary of chapter one.

Chapter 2 presented the literature review as the work from the past scholars in the similar field of area. In this chapter, several subsections have been established to give a clear understanding of the previous work that has been done and clarifies on the basic foundation for this research. There four main constructs studied in this research namely talent competence, human resource management practices, employee engagement and individual work performance. This chapter also has continuously explained on each generation of hypothesis, underpinning theories, research gap, integrative framework of research and finally, the summary of the chapter.

Chapter 3 presented the research methodological stance of this study. In this chapter, several subsections have detailed explained on the process and systematic plan to conduct the study. The subsection includes research philosophy, approach of quantitative, research design, research population, sampling method, sample size, unit analysis, type of data, research methodology stages and finally, summary of the chapter.

Chapter 4 presented the data analysis and result attained from this research. In this chapter, several subsections have been established to give a clear understanding on each assessment taken during the data analysis step. There are two main statistical softwares employed in this study which are IBM SPSS software and SmartPLS version 3.2.7 software. This chapter also has continuously explained on

each assessment, indication of acceptance or rejection of hypothesis and finally, the summary of chapter.

Chapter 5 presented the discussion and conclusion. This chapter also discussed the attained results obtained and provideed further justification which has been highlighted from the previous work of literature. In this chapter, several subsections have been established such as discussion on the results, implication of theoretical and practical of the research, limitation of the research, recommendation for future research and finally, the summary of chapter.

1.12 Summary of Chapter

This chapter outlines the introduction of this research by presenting the research background and rationale of the present study. Apart from that, this chapter also helps to set up the fundamental steps for this research based on the relevant information presented in the subsection of problem statement and background of the study. This chapter also consequently describing the research objectives of the study. Besides that, the researcher also has presented the research questions and research hypotheses. The hypotheses are generated based on the previous work of literature and the details are explained in Chapter 2. There are several following subsections have been established to explain the foundation of this research such as significance of study, scope of study, limitation of study and definition of terms. Next chapter two, researcher will outline and present the review of literature from past work. Chapter 2 will presents a critical review related to each construct, explain underpinning theories in details, and illustrate conceptual framework.

REFERENCES

- Abassi, S.M. & Hollman, K.W. (2000). Turnover: The Real Bottom Line. *Public Personnel Management*, Vol. 2 No. 3, pp. 333-342.
- Abdul Ghani Azmi, I. (2015). Islamic Human Resource Practices and Organizational Performance: Some Findings in a Developing Country. *Journal of Islamic Accounting and Business Research*, 6(1), 2–18.
- Abdul Halim, H., & Che Ha, N. (2014). Outsourcing the Human Resource Functions: The Relationship among Business Strategy, Human Resource Outsourcing and Human Resource Performance. *Australian and New Zealand Academy of Management*, 1–15.
- Ahmad, T., Farrukh, F., & Nazir, S. (2015). Capacity Building Boost Employees Performance. *Industrial and Commercial Training*, 47(2), 61–66.
- Akkermans, J., Schaufeli, W. B., Brenninkmeijer, V., & Blonk, R. W. B. (2013). The Role of Career Competencies in the Job Demands Resources model. *Journal of Vocational Behavior*, 83(3), 356–366.
- Aktar, A., & Pangil, F. (2017). The Relationship between employee Engagement, HRM Practices and perceived Organizational Support: Evidence from Banking Employees. *International Journal of Human Resource Studies*, 7(3), 1.
- Alagaraja, M., & Shuck, B. (2015). Exploring Organizational Alignment-Employee Engagement Linkages and Impact on Individual Performance: A Conceptual Model. *Human Resource Development Review*, *14*(1), 17–37.
- Alejandro, O. ., & Helena, D. . (2017). Work Engagement, Social Support and Job Satisfaction in Portuguese Nursing Staff: A Winning Combination. *Applied Nursing Research*, 36, 37–41.
- Alfes, K., Shantz, A., & Alahakone, R. (2016). Testing Additive Versus Interactive Effects Of Person-Organization Fit and Organizational Trust on Engagement and Performance. *Personnel Review*, 45(6), 1323–1339.
- Alfes, K., Truss, C., Soane, E. C., & Mark, G. (2013). The Relationship Between Line Manager Behavior, Perceived HRM Practices and Individual Performance: Examining the Mediating Role of Engagement. *Wiley Periodicals Inc*, 52(6), 839–859.

- Anas Mahmoud, K. B. The Relationship Between Organizational Culture, Human Resource Management Practices and Organizational Performance: The Case of Jordanian Insurance Sector. Ph.D. Thesis. Universiti Sains Islam Malaysia; 2014.
- Anitha, J. (2014). Determinants of Employee Engagement and Their Impact on Employee Performance. *International Journal of Productivity and Performance Management*, 63(3), 308–323.
- Anvari, A. F., Soltani, I., & Rafiee, M. (2016). Providing the Applicable Model of Performance Management with Competencies Oriented. *Procedia Social and Behavioral Sciences*,230,190–197.
- Armstrong, T.S., Cohen, M., Eriksen, L., & Cleeland, C. (2005). Content Validity of Self-Report Measurement Instruments: An Illustration from the Development of the Brain Tumor Module of the M. D. Anderson Symptom Inventory. *Oncol Nurs Forum*; 32: 669–676.
- Aryee, S., Budhwar, P. S., & Chen, Z. X. (2002). Trust as a Mediator of the Relationship between Organizational Justice and Work Outcomes: Test of a Social Exchange Model. *Journal of Organizational Behavior*, 23(3), 267-286.
- Aryee, S., Chen, Z.X. & Budhwar, P.S. (2004), "Exchange Fairness and Employee Performance: An Examination of the Relationship between Organizational Politics and Procedural Justice", *Organizational Behavior and Human Decision Processes*, Vol. 94, pp. 1-14.
- Arvey, R.D. & Murphy, K.R. (1998). Performance Evaluation in Work Setting. Annual Review of Psychology, Vol. 49, pp. 141-168.
- Asfaw, A. M., Argaw, M. D., & Bayissa, L. (2015). The Impact of Training and Development on Employee Performance and Effectiveness: A Case Study of District Five Administration Office, Bole Sub-City, Addis Ababa, Ethiopia. *Journal of Human Resource and Sustainability Studies*, 03(04), 188–202.
- Ashikali, T., & Groeneveld, S. (2015). Diversity Management for All? An Empirical Analysis of Diversity Management Outcomes Across Groups. *Personnel Review*, 44(5), 757–780.
- Asia, H. (2018). Navigating asia 's changing workforce: Understanding Tomorrow 's the 2018 Hays Asia Salary Guide, *Hays Group*
- Aswathappa, K. (1996). *Human Resource Management*. Delhi: Tata McGraw-Hill Publishing Company Limited

- Azer, I., Hamzah, H. C., Aishah, S., & Abdullah, H. (2016). Contribution of Economic Sectors to Malaysian GDP. *Regional Conference on Science*, *Technology and Social Sciences (RCSTSS 2014)*, 183–189.
- Bakker, A.B., & D. Xanthopoulou. (2009). The Crossover of Daily Work Engagement: Test of an Actor-Partner Interdependence Model. *Journal of Applied Psychology* 94: 1562–71.
- Bakker, A. B., & Van Woerkom, M. (2017). Flow at Work: a Self-Determination Perspective. *Occupational Health Science*, *1*(1–2), 47–65.
- Bal, P. M., Kooij, D., & De Jong, S. B. (2013). How do Developmental and Accommodative HRM Enhance Employee Engagement and Commitment? The Role of Psychological Contract and SOC Strategies. *Journal of Management Studies*.
- Baumruk, R. (2004). The Missing Link: The Role of Employee Engagement in Business Success. *Workspan*, Vol. 47, pp. 48-52.
- Becker BE & Huselid MA (2006) Strategic Human Resources Management: Where do We go from Here? *Journal of Management* 32(6): 898–925.
- Bedarkar, M., & Pandita, D. (2014). A Study on the Drivers of Employee Engagement Impacting Employee Performance. *Procedia Social and Behavioral Sciences*.
- Bengal, I. (2005). *Outlier Detection, Data Mining and Knowledge Discovery Handbook*: A Complete Guide for Practitioners and Researchers. Kluwer Academic Publishers.
- Blau, P. M. (1964). Exchange and Power in Social Life. New York: Wiley.
- BNM. (2017). Economic Developments in 2017. Bank Negara Malaysia.
- Bollen, K. A., & Lennox, R. (1991). Conventional Wisdom on Measurement: A structural Equation Perspective. *Psychological Bulletin*, 110, 305-314.
- Borman, W. C., & Motowidlo, S. J. (1993). Expanding the Criterion Domain to include Elements of Contextual Performance. In N. Schmitt, & W. C. Borman (Eds.), Personnel selection in organizations (pp. 71-98). San Francisco: Jossey-Bass
- Boxall, P. (2014). The Future of Employment Relations from the Perspective of Human Resource Management. *Journal of Industrial Relations*, 56(4), 578–593.
- Boyatzis, R.E. (1982). *The Competent Manager: A Model for Effective Performance*. John Wiley & Sons, New York, NY.

- Bradford R. Eichhorn. (2014). *Common Method Variance Techniques*. The SAGE Encyclopedia of Industrial and Organizational Psychology, 2nd edition.
- Buil, I., Martinez, E., & Matute, J. (2018). Transformational Leadership and Employee Performance: The Role of Identification, Engagement and Proactive Personality. *International Journal of Hospitality Management*
- Caliguri.P (2000). The Big Five Personality Characteristics As Predictors Of Expatriate Success, *Personnel Psychology*, 53: 67-88
- Campbell, J.P. (1990). *Modeling the Performance Prediction Problem in Industrial* and Organizational Psychology. Handbook of Industrial and Organizational Psychology, Consulting Psychologists Press, Palo Alto, CA, pp. 687-732.
- Cao, X., Guo, X., Vogel, D., & Zhang, X. (2016). Exploring the Influence of Social Media on Employee Work Performance. *Internet Research*, 26(2), 529–545.
- Carnevale, A. P., & Smith, N. (2013). Workplace Basics: The Skills Employees Need and Employers Want. *Human Resource Development International*, 16(5), 491–501.
- Chandran, V. G. R., Gopi Krishnan, K. K. V., & Evelyn, S. D. (2017). Value-Added Performance in Malaysian Manufacturing: To What Extent Research and Development and Human Capital Matter? *Institutions and Economies*, *9*(4), 31–51.
- Chen, A. S. Y., Bian, M. D., & Hou, Y. H. (2015). Impact of Transformational Leadership on Subordinate's EI and Work Performance. *Personnel Review*, 44(4), 438–453.
- Cheng, M., Dainty, A.R.J. And Moore, D.R. (2003). The Differing Faces Of Managerial Competency In Britain And America. *Journal Of Management Development*, Vol. 22 No. 6, 527-537.
- Chin, W. W. (1998). The Partial Least Squares Approach for Structural Equation Modeling. In G. A. Marcoulides (Ed.), Methodology For Business and Management. Modern Methods for Business Research (Pp. 295-336). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.
- Ciobanu, A., & Androniceanu, A. (2015). Civil Servants Motivation and Work Performance in Romanian Public Institutions. *Procedia Economics And Finance*, 30(15),
- Cohen, J., & Cohen, P. (1983). Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences. Hillsdale, NJ: Erlbaum.

- Cohen, J. (1988). *Statistical Power Analysis For The Behavioral Sciences* (2nd Ed.). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.
- Coleman, A. (2005). Less Vacant, More Engaged. Available at:www.employeebenefits.co.uk (Accessed 15 July 2006)
- Conway, E., Fu, N., Monks, K., Alfes, K., & Bailey, C. (2016). Demands or Resources? The Relationship between HR Practices, Employee Engagement and Emotional Exhaustion within a Hybrid Models of Employment Relations. *Wiley Periodicals Inc*, 55(5), 901–917.
- Cook, K. S., Cheshire, C., Rice, E. R. W., & Nakagawa, S. (2013). *Social Exchange Theory*. In J. Delamater & A. Ward (Eds.), Handbooks Of Sociology and Social Research. Handbook Of Social Psychology (P. 61–88).
- Cox A And M Warner (2013) Whither 'Training and Development' in Vietnam? Learning from United States and Japanese MNCs' Practice. *Asia Pacific Journal of Human Resources* 51, 175–192.
- Creswell, J. W. (1994). Research Design: Qualitative & Quantitative Approaches. Thousand Oaks, CA, US: *Sage Publications, Inc.*
- Creswell, J. W. (2003). Research Design: Qualitative, Quantitative and Mixed Methods Approaches. Sage Publications.
- Creswell, J. W. (2009). Research Design: Qualitative, Quantitative and Mixed Methods Approaches (3rd Ed.). Thousand Oaks, CA, US: Sage Publications, Inc.
- Cronbach, L. J. (1971). *Test Validation*. In R. Thorndike (Ed.), Educational Measurement (2nd Ed., P. 443). Washington DC: American Council on Education.
- Dastisheh, A., & Farooq, M. (2018). Antecedents of Employees Performance in Malaysia IT Industries. *Journal of Business and Management*, 20(7), 52–60.
- De Meuse, K. P., Dai, G., & Hallenbeck, G. S. (2010). Learning Agility: A Construct Whose Time Has Come. *Consulting Psychology Journal*, 62(2), 119–130.
- Decenzo David A. & Stephen Robbins P., Human Resources Management, *John Wiley & Soans Inc.* New York, 1994.
- Deci, E. L., & Ryan, R. M. (1991). A Motivational Approach to Self: Integration in Personality. In R. Dienstbier (Ed.), Nebraska Symposium On Motivation: Vol. 38. Perspectives On Motivation (Pp. 237-288). Lincoln: University Of Nebraska Press

- Dehaghi, M. R., & Rouhani, A. (2014). Studying the Relationship between the Effective Factors on Employees' Performance in Iran's University and the Students' Satisfaction with Regards to Employees' Performance. *Procedia Social and Behavioral Sciences*, 141, 903–908.
- Demo, G., Neiva, E. R., Nunes, I., & Rozzett, K. (2012). Human resources Management Policies and Practices Scale (HRMPPS): Exploratory and Confirmatory Factor Analysis. *BAR Brazilian Administration Review*, *9*(4), 395–420.
- Department of Statistics Malaysia, A. (2015). Report on Survey of Manufacturing Industries 2015, Department of Statistics Malaysia
- Dharmanegara, I. B. ., Sitiari, N. ., & Wirayudha, G. (2016). Job Competency and Work Environment: The Effect on Job Satisfaction and Job Performance among SMEs worker. *IOSR Journal of Business and Management*, 18(1), 19–26.
- Diamantidis, A. D., & Chatzoglou, P. (2019). Factors Affecting Employee Performance: An Empirical Approach. *International Journal of Productivity and Performance Management*, 68(1), 171–193.
- Diamantopoulos, A., & Winklhofer, H. M. (2001). Index Construction with Formative Indicators: An Alternative to Scale Development. *Journal of Marketing Research*, 38, 269-277.
- DiLiello, T. C., & Houghton, J. D. (2006). Maximizing Organizational Leadership Capacity for the Future: Toward a Model of Self-Leadership, Innovation and Creativity. *Journal of Managerial Psychology*, 21(4), 319–337.
- DOSM. (2016). *Monthly Manufacturing Statistics Malaysia*. Department of Statistics Malaysia, 3(1), 56.
- Downey, S. N., Werff, L., Thomas, K. M., & Plaut, V. C. (2015). The Role of Diversity Practices and Inclusion in Promoting Trust and Employee Engagement. *Journal of Applied Social Psychology*, 45(1), 35–44.
- Dries, N., Vantilborgh, T., & Pepermans, R. (2012). The Role of Learning Agility and Career Variety in the Identification and Development of high Potential Employees. *Personnel Review*, *41*(3), 340–358.
- Edwards, J. R., & Bagozzi, R. P. (2000) On the Nature and Direction of Relationships between Constructs. Psychological Methods (5:2) pp. 155-174.
- Edwin, R. ., & Hundley, V. (2011). Pilot study. *The SAGE Encyclopedia of Social Science Research Method*, 16(1), 6–11.

- Eichinger, R. W., & Lombardo, M. M. (2000). High Potentials as High Learners. *Human Resource Management*, 39(4), 321–329.
- Farndale, E., E. Beijer, S., J.P.M. Van Veldhoven, M., Kelliher, C., & Hope-Hailey, V. (2014). Work and Organisation Engagement: Aligning Research and Practice. *Journal of Organizational Effectiveness*, 1(2), 157–176.
- Fauzilah, S., Zaharah, D., Wan Amalina, W. A., & Nur Haizal, A. (2011). The Effect of Motivation on Job Performance of state Government Employees in Malaysia. *International Journal of Humanities and Social Science*, *1*(4), 147–154.
- Fiske, D. W., & Campbell, D. T. (1992). Citations Do Not Solve Problems. *Psychological Bulletin*, 112(3), 393-395.
- Fleury, M.-J., Grenier, G., Bamvita, J.-M., & Chiocchio, F. (2017). Variables Associated with Work Performance in Multidisciplinary Mental Health Teams. *SAGE Open Medicine*, *5*, 1–12.
- Fornell, C., and Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research* (18:1), pp. 39-50.
- Fry, L. W. (2003). *Toward a Theory of Spiritual Leadership*. Leadership Quarterly, 14(6), 693–727.
- Gabriela, K. (2014). The Relationship between Competency and Performance. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 62(6), 1315–1327.
- Gallardo-Gallardo, E., Dries, N., & González-Cruz, T. F. (2013). What is the Meaning of "Talent" in the World of Work? *Human Resource Management Review*, 23(4), 290–300.
- Ganesan, S. (2014). Introduction of HRM. *International Journal of Business and Administration Research*2, 1(6), 147.
- Gebauer, J., & Lowman, D. (2008). Closing the engagement Gap: How Great Companies Unlock Employee Potential for Superior Results. New York: Penguin Group
- Geisser, S. (1975). The Predictive Sample Reuse Method with Applications. *Journal* of the American Statistical Association. 70, 320-328.
- Ghosh, D., & Gurunathan, L. (2015). Do Commitment Based Human Resource Practices Influence Job Embeddedness and Intention to Quit? *IIMB Management Review*, 27(4), 240–251.

- Guan, X., & Frenkel, S. (2018). How HR practice, Work Engagement and Job Crafting Influence Employee Performance. *Chinese Management Studies*, 12(3), 591–607.
- Guest, D.E., 2007. *HRM and the Worker: Towards a new Psychological Contract?* In: Boxall, P., Purcell, J., Wright, P. (Eds.), The Oxford Handbook of Human Resource Management. Oxford University Press, New York, pp. 129–146
- Gupta, N., & Sharma, V. (2016). Exploring Employee Engagement A Way to Better Business Performance. *Global Business Review*, 17, 45-63.
- Hadiyanto, H., Amirul, M., Makmur, Hidayat, M., & Failasofah. (2013). Teaching in a Digital Era: English Lecturers' Readiness toward the Internet Use in Teaching and Learning at selected Higher Education Institutions in Indonesia. *Asia-Pacific Collaborative Education Journal*, 9(2), 113–124.
- Harman, H.H. (1960) Modern factor analysis. University of Chicago Press, Chicago.
- Hair Jr., J. F. et a. (1998). *Multivariate Data Analysis with Readings*. Englewood Cliffs, NJ: Prentice-Hall.
- Hair, J., Black, W., Babin, B. and Anderson, R. (2010) *Multivariate Data Analysis*. Prentice Hall, Inc., Upper Saddle River.
- Hair, J., Ringle, C. & Sarstedt, M. (2011) PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, 19, 139-151.
- Hair, Joe F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). *Partial Least Squares Structural Equation Modeling (PLS-SEM): An Emerging Tool in Business Research*. European Business Review (Vol. 26).
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. 2016. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. 2nd edition, Thousand Oaks, CA: *Sage*.
- Hair, Joseph F., Babin, B. J., & Krey, N. (2017). Covariance-Based Structural Equation Modeling in the Journal of Advertising: Review and Recommendations. *Journal of Advertising*, 46(1), 163–177.
- Hamzah, M. ., Osman, A., & Qudah, H. . (2014). The Effect of human Resources Management Practices on Employee Performance. *International Journal of Scientific & Technology Research*, 3(9), 86–99.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business Unit Level Relationship between Employee Satisfaction, Employee Engagement, and Business Outcomes: A Meta-Analysis. Journal of Applied Psychology, 87, 268–

- Haruna, A. Y., & Marthandan, G. (2017). Foundational Competencies for Enhancing Work Engagement in SMEs Malaysia. *Journal of Workplace Learning*, 29(3).
- Hashim, J., & Wok, S. (2014). Competence, Performance and Trainability of Older Workers of Higher Educational Institutions in Malaysia. *Employee Relations*, 36(1), 82–106.
- Hayes, A. F., & Scharkow, M. (2013). The Relative Trustworthiness of Inferential Tests of the Indirect Effect in Statistical Mediation Analysis: Does Method Really Matter? *Psychological Science*, 24(10), 1918-1927.
- Hayrol Azril, M. ., Jegak, U., Asiah, M., Noor Azman, A., Bahaman, A. ., Jamilah, O., & Thomas, K. (2010). Can Quality of Work Life Affect Work Performance among Government Agriculture Extension Officers? A Case from Malaysia. *Journal of Social Sciences*, 6(1), 64–73.
- Hays Asia. (2019). Positivity, Growth and Development: Understanding Asia 's Talent and Strategising: The 2019 Hays Asia Salary Guide., *Hays Group*
- Hee, O. C., & Jing, K. R. (2018). The Influence of Human Resource Management Practices on Employee Performance in the Manufacturing Sector in Malaysia. *International Journal of Human Resource Studies*, 8(2), 129.
- Hellriegel, D., Jackson, S.E., & Slocum, J.W. (1999). *Management* (8th Ed.). Cincinnati, Ohio: South-Western College.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2014). A New Criterion for Assessing Discriminant Validity in Variance-Based Structural Equation Modeling. *Journal of The Academy of Marketing Science*, 43(1), 115–135.
- Hernaus, T., & Mikulić, J. (2014). Work Characteristics and Work Performance Of Knowledge Workers. *Euromed Journal of Business*, 9(3), 268–292.
- Homans, George C. (1961) Social Behaviour: Its Elementary Forms. New York: Harcourt, Brace & World, Inc.
- Ibrahim, H. I., & Mohammad Shah, K. A. (2013). Effects of Organizational Characteristics Factors on the Implementation of Strategic Human Resource Practices: Evidence from Malaysian Manufacturing Firms. *Econommia Seria Management*, 16(1).
- Ipsosbusinessconsulting. (2012). E & E Sector Study On The Supply-Demand Of Talent In Malaysia. Ipsos, (April), 1–135.

- Ismail, R. M., & Razak, R. C. (2010). Lean Research on Malaysia Manufacturing Sector: A General Review. *Universiti Utara Malaysia*.
- James Wolf, F. (2011). Self-Administered Questionnaire. *In Encyclopedia of Survey Research Methods* (pp. 1–3).
- Jarvis, C. B., MacKenzie, S. B., & Podsakoff, P. M. (2003). A critical Review of Construct Indicators and Measurement Model Misspecification in Marketing and Consumer Research. *Journal of Consumer Research*, 30(2), 199-218.
- Jaskiene, J. (2015). HRM Practices Enhancing Research Performance. *Procedia Social and Behavioral Sciences*, 213, 775–780.
- Jehn, K.A. & Bezrukova, K. (2004). A Field Study of group Diversity, Workgroup Context, and Performance. *Journal of Organizational Behavior*, Vol. 25 No. 6, pp. 703-729.
- Jena, L.K., & Pradhan, R.K. (2014). Deliverables towards HR Sustainability: A Conceptual Review. *European Journal of Business Management*, 6(23), 95–102.
- Jena, L. K., Pradhan, S., & Panigrahy, N. P. (2018). Pursuit of Organisational Trust: Role of Employee Engagement, Psychological Well-Being and Transformational Leadership. *Asia Pacific Management Review*, 23(3), 227–234.
- Jessica Xu, & Helena Cooper Thomas, (2011). How can Leaders Achieve High Employee Engagement? Leadership & Ramp; *Organization Development Journal*, Vol. 32, 4, 399 416.
- Joanne Peng, C., Harwell, M., Liou, S., & Lee, H. (2002). Advances in Missing Data Methods and Implications for Educational Research.
- Johanson, G. A., & Brooks, G. P. (2010). Initial Scale Development: Sample Size for Pilot Studies. *Educational and Psychological Measurement*, 70(3), 394–400.
- Joon Chang, H. (2012). The Manufacturing Sector and the Future of Malaysia's Economic Development. *Jurnal Pengurusan*, *35*, 3–12.
- Jouda, A. A., Ahmad, U., & Abed Dahleez, K. (2016). International Review of Management and Marketing the Impact of Human Resource Management Practices on Employees Performance: The Case of Islamic University of Gaza in Palestine. *International Review of Management and Marketing*, 6(4), 1080–1088.

- Juhdi, N., Pa'wan, F., & Milah, R. (2012). Examining Characteristics of High Potential Employees from Employees' Perspective. *International Journal of Arts & Sciences*, 5(7), 175–186.
- Jurgita, L. ., Ieva, U., & Rita, R. B. (2018). From Psychosocial Working Environment to Good Performance: The Role of Work Engagement. *Baltic Journal of Management*, 13(2), 236–249.
- Kahn, W.A. (1990). Psychological Conditions of Personal Engagement and Disengagement at Work. *Academy of Management Journal*, Vol. 33 No. 4, pp. 692-724.
- Kamaruddin, S. N. A. A., Omar, K., Muda, M. ., Saputra, J., & Ismail, S. A. (2017). Motivation, Time Management and Work Performance among Female Workers in Malaysia. *International Journal of Advanced And Applied Sciences*, 4(12), 273–280.
- Karakas, F. (2010). Spirituality and Performance in Organizations: A Literature Review. *Journal of Business Ethics*, 94(1), 89–106.
- Karatepe, O. M. (2013). High-Performance Work Practices and Hotel Employee Performance: The mediation of Work Engagement. *International Journal of Hospitality Management*, 32, 132–140.
- Karatepe, O. M., Yavas, U., Babakus, E., & Deitz, G. D. (2018). The Effects of Organizational and Personal Resources on Stress, Engagement, and Job Outcomes. *International Journal of Hospitality Management*, 74(March), 147–161.
- Karna, H., & Gotovac, S. (2015). Evaluating Expert Estimators Based on Elicited Competences. *Journal of Information and Organizational Sciences*, 39(1), 49–63.
- Kaya Yilmaz, Z. (2013). Comparison of Quantitative and Qualitative Research Traditions: Epstemological, Theoritical, and Methodological Difference. *European Journal of Education*, 48(2), 311–325.
- KellyServicesInc. (2012). *Employment Outlook 2012 Malaysia*. Kelly Services Inc, 1–6.
- Khatri, N., Fern, C.T. & Budhwar, P. (2001). Explaining Employee Turnover in an Asian Context. *Human Resource Management Journal*, Vol. 11 No. 1, pp. 54-74

- Kianto, A., Sáenz, J., & Aramburu, N. (2017). Knowledge-Based Human Resource Management Practices, Intellectual Capital and Innovation. *Journal of Business Research*, 81, 11–20.
- Kieser, M., & Wassmer, G. (1996). On the use of the Upper Confidence Limit for the Variance from a Pilot Sample for Sample Size Determination. *Biometrical Journal*, 38, 941-949.
- Kim, W., Kolb, J. A., & Kim, T. (2013). The Relationship between Work Engagement and Performance: A Review of Empirical Literature and a Proposed Research Agenda. *Human Resource Development Review*, 12(3), 248–276.
- Kock, N. (2015). Common Method Bias in PLS-SEM: A Full Collinearity Assessment Approach. *International Journal of E-Collaboration*, 11(4), 1–10.
- Koh, A. (2003). Global Flows of Foreign Talent: Identity Anxieties in Singapore'S Ethnoscape. *Journal of Social Issues in Southeast Asia*, 18(2), 230–256.
- Koopmans, L., Bernaards, C., Hildebrandt, V., Van Buuren, S., Van Der Beek, A. J., & De Vet, H. C. w. (2012). Development of an individual Work Performance Questionnaire. *International Journal of Productivity and Performance Management*, 62(1), 6–28.
- Koopmans, L., Bernaards, C.M., Hildebrandt, V.H., Schaufeli, W.B., De Vet, H.C.W. & Van der Beek, A.J. (2011). Conceptual frameworks of Individual Work Performance A Systematic Review. *Journal of Occupational and Environmental Medicine*, Vol. 53 No. 8, pp. 856-66
- Koopmans, L., Coffeng, J. K., Bernaards, C. M., Boot, C. R., Hildebrandt, V. H., De Vet, H. C., & Van Der Beek, A. J. (2014). Responsiveness of the Individual Work Performance Questionnaire. *BMC Public Health*, 14(1).
- Kotlyar, I. (2018). Identifying High Potentials Early: Case Study. *Journal of Management Development*, 37(9–10), 684–696.
- Krejcie, R.V., & Morgan, D.W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30, 607-610
- Krishnan, R., Ismail, S., Ismail, I., Muhammed, R. N., & Muthusamy, G. (2015). Employee Work Engagement: Understanding The Role Of Job Characteristics And Employee Characteristics. *Journal of Apploed Environmental and Biological Sciences*, 4(10S), 58–67.
- Kwame Mensah, J. (2015). A "Coalesced Framework" of Talent Management and

- Employee Performance: For Further Research and Practices. *International Journal of Productivity and Performance Management*, 64(4), 551–567.
- Le Deist, F. D., & Winterton, J. (2005). What is Competence? *Human Resource Development International*, 8(1), 27–46.
- Lee, C. (2019). Manufacturing Performance and Services Inputs: Evidence from Malaysia. *Yusof Ishak Institute*,
- Lester, S. (2014). Professional Standards, Competence and Capability. *Higher Education, Skills and Work-Based Learning*, 4(1), 31–43.
- Li, X., Sanders, K., & Frenkel, S. (2012). How Leader–Member Exchange, Work Engagement and HRM Consistency Explain Chinese Luxury Hotel Employees' Job Performance. *International Journal of Hospitality Management*, 31(4), 1059–1066.
- Ling, T. C., & Mohd Nasurdin, A. (2010). Human Resource Management Practices and Organizational Innovation: An Empirical Study in Malaysia. *Journal of Applied Business Research (JABR)*, 26(4), 105–116.
- Liguori, W., McLarty, B. & Muldoon, J. (2013). The Moderating Effect of Perceived Job Characteristics on the Proactive Personality-Organizational Citizenship Behavior Relationship. Leadership & Organization Development Journal, Vol. 34 No. 8, pp. 724-740.
- Lombardo, M. M., & Eichinger, R. W. (2000). High Potentials as High Learners. *Human Resource Management*, 39, 321–330.
- Lombardo, M.M. & Eichinger, R.W. (2003), The Leadership Architect Norms and Validity Report, *Lominger Limited*, Minneapolis, MN.
- London, M. (2003). Job Feedback: Giving, Seeking and Using Feedback for Performance Improvement (2nd ed.). Mahwah, NJ: Lawrence Erlbaum
- Long, C. S., Perumal, P., & Ajagbe, M. A. (2012). The Impact of Human Resource Management Practices on Employees' Turnover Intention: A Conceptual Model. *Journal of Cotemporary Research in Business*, 4(2), 629–641.
- Lynn, M. R. (1986). Determination and Quantification of Content Validity. *Nursing Research*, 35(6), 382-385.
- Maria Pampaka, Graeme Hutcheson & Julian Williams (2016) Handling Missing
 Data: Analysis of a Challenging Data Set Using Multiple Imputation,
 International Journal of Research & Method in Education, 39:1, 19-37
- Marshall, M.N. (1996) Sampling for Qualitative Research. Family Practice, 13, 522-

- Mathers, N., Fox, N., & Hunn, A. (2010). Surveys and Questionnaires. *The NIHR Research Design Service for Yorkshire & the Humber*, 1–48.
- Mathias, R.J. and Jackson, J.H. (2000). *Human Resource Management*, South Western College Publishing, OH.
- McCoach, D. B. (2002). A Validation Study of the School Attitude Assessment Survey. *Measurement and Evaluation in Counseling and Development*, 35, 66–77.
- Md. Amin, B., & Abdul Majid, A. . (2017). A Study Relationship Work Environment and Employee Performance on Manufacturing Sector in Penang, Malaysia. *Journal of Advanced Research in Social and Behavioural Sciences*, 8(1), 16–22.
- Menguc, B., Auh, S., Fisher, M., & Haddad, A. (2013). To be Engaged or Not to be Engaged: The Antecedents and Consequences of Service Employee Engagement. *Journal of Business Research*, 66(11), 2163–2170.
- Meswantri, M., & Awaludin, A. (2018). Determinant of Employee Engagement and Its Implications on Employee Performance. *International Review of Management and Marketing*, 8(3), 36–44.
- Meyers, L. S., Gamst, G., & Guarino, A. J. (2006). Applied Multivariate Research: Design and Interpretation. Thousand Oaks: *Sage Publications*.
- Meyer, G., Brünig, B., & Nyhuis, P. (2015). Employee Competences in Manufacturing Companies An Expert Survey. *Journal of Management Development*, 34(8), 1004–1018.
- Mikkelsen, Aslaug and Kjell Gronhaug. (1999) Measuring Organizational Learning Climate: A Cross-National Replication and Instrument Validation Study Among Public Sector Employees, Review of Public Personn
- Minichiello, V., Aroni, R., Timewell, E., & Alexander, L. (1990). In-Depth Interviewing: Researching People. Hong Kong: Longman Cheshire.
- MITI. (2018). *Industry 4wrd: National Policy on Industry 4.0*. Ministery of International Trade and Industry.
- Mohd Zin, M. L., Mohd Shamsudin, F., & Subramaniam, C. (2013). Investigating the Influence of Job Rotation on Career Development Among Production Workers in Japanese Companies. *International Journal of Business and Society*, 14(1), 135–148.
- Mone, E.M., & London, M. (2009). Employee engagement Through Effective

- Performance Management: A Manager's Guide. New York: Routledge.
- Mostafa, A.M. & Gould-Williams, J.S. (2014). Testing the Mediation Effect of Person Organisation Fit on the Relationship between High Performance HR Practices and Employee Outcomes in the Egyptian Public Sector. The *International Journal of Human Resource Management*, Vol. 25 No. 2, pp. 276-292.
- Nabil, A., Dayana Farzeeha, A., Muhammad Khair, N., & Mohd Safarin, N. (2011). Non-technical Skills for Technical Skilled Workers in Malaysia. *Proceedings of IETEC*.
- Nae, E. Y., Moon, H. K., & Choi, B. K. (2015). Seeking Feedback but Unable to Improve Work Performance? Qualified Feedback from Trusted Supervisors Matters. *Career Development International*, 20(1), 81–100.
- Nangov, R., Sasmoko, & Indrianti, Y. (2018). Psychological capital, Work Well-Being, and Job Performance. *International Journal of Engineering & Technology*, 7(4.9), 63–65.
- Nasurdin, A. M., Ling, T. C., & Khan, S. N. (2018). Linking social Support, Work Engagement and Job Performance in Nursing. *International Journal of Business and Society*, 19(2), 363–386.
- Nazir, O., & Islam, J. U. (2017). Enhancing Organizational Commitment and Employee Performance through Employee Engagement. *South Asian Journal of Business Studies*, 6(1), 98–114.
- Othman, N., & Nasurdin, A. A. M. (2011). Work Engagement of Malaysian Nurses: Exploring the Impact of Hope and Resilience. *International Journal of Social, Management, Economics and Business Engineering*, 5(12), 395–399.
- Pahos, N., & Galanaki, E. (2018). Staffing Practices And Employee Performance: the Role Of Age. *Evidence-Based HRM*, 7(1), 93–112.
- Pawirosumarto, S., Sarjana, P. K., & Muchtar, M. (2017). Factors affecting Employee Performance of PT.Kiyokuni Indonesia. *International Journal of Law and Management*, 59(4), 602–614.
- Pepermans, R., Vloeberghs, D., & Perkisas, B. (2003). High Potential Identification Policies: An Empirical Study Among Belgian Companies. *Journal of Management Development*, 22(7–8), 660–678.
- Phillips, J. M. & Gully, S.M. (2012). *Organizational Behaviour: Tools for Success*. New York: Cengage Learning.

- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*, 88(5), 879–903.
- Polit, D.F. & Beck, C.T. (2004). *Nursing Research: Principles and Methods*. 7th Edition, Lippincott Williams & Wilkins, Philadelphia.
- Pradhan, R. K., & Jena, L. K. (2017). Employee Performance at Workplace: Conceptual Model and Empirical Validation. *Business Perspectives and Research*, 5(1), 69–85.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and Resampling Strategies for Assessing and Comparing Indirect Effects in Multiple Mediator Models. *Behavior Research Methods*, 40(3), 879–891.
- Queirós, A., Faria, D., & Almeida, F. (2017). Strengths and Limitations of Qualitative and Quantitative Research Methods. European Journal of Education Studies, 3(9), 369–387.
- Rai, A., Ghosh, P., Chauhan, R., & Singh, R. (2018). Improving In-Role and Extra-Role Performances with Rewards and Recognition: Does Engagement Mediate the Process? *Management Research Review*, 41(8), 902–919.
- Ramayah, T., Yeap, J. A. L., & Ignatius, J. (2014). Assessing Knowledge Sharing Among Academics: A Validation of the Knowledge Sharing Behavior Scale (KSBS). *Evaluation Review*, 38(2), 160–187.
- Ramayah, T., Cheah, J., Chuah, F., Ting, H., & Memon, M. A. (2018). *Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS 3.0: An Updated Guide and Practical Guide to Statistical Analysis* (2nd ed.), Pearson.
- Randstad. (2017). Global Report Randstad Workmonitor Q3, 2017 Regularly Refreshing Skills and Competencies Considered Essential to Enhance Employability. *Group Communicatons Randstad Holding*
- Rasli, A., Tat, H. H., Chin, T. A., & Khalaf, B. (2012). Employee Engagement and Employee Shareholding Program in a Multinational Company in Malaysia. *Procedia - Social and Behavioral Sciences*, 40, 209–214.
- Rich, B. L., LePine, J. A., & Crawford, E. R. (2010). Job Engagement: Antecedents and Effects on Job Performance. *Academy of Management Journal*. 53(3), 617-635.
- Richard, E. (2008). Competencies in the 21st century. *Journal of Management Development*, 27(1), 5–12.

- Richardson, H.A., Simmering, M.J. & Sturman, M.C. (2009) A Tale of Three Perspectives: Examining Post Hoc Statistical Techniques for Detection and Correction of Common Method Variance. *Organizational Research Methods*, 12, 762-800.
- Richman, A. (2006). Everyone Wants an Engaged Workforce How Can You Create it? *Workspan*, Vol. 49, pp. 36-9.
- Ringle, C.M., Sarstedt, M. and Straub, D.W. (2012). Editor's Comments: A Critical Look at the Use of PLS-SEM in MIS quarterly. *MIS Quarterly*, Vol. 36 No. 1.
- Rioux, S.M., Bernthal, P.R. and Wellins, R. S. (2009). *The Globalization of Human Resource Practices*. Special Report for Development Dimensions International. Bridgeville.
- Robbins, S. P., Judge, T. A., & Campbell, T. T. (2010). *Organizational Behaviour*. Harlow Essex, England: Pearson Education.
- Robinson, J. P., Shaver, P. R., & Wrightsman, L. S. (Eds.). (1991). Measures of Personality and Social Psychological Attitudes. *San Diego, CA, US: Academic Press*.
- Roderick, J. ., Ralph, D., Cohen, M. ., Kay, D., Emerson, S., Farrar & J. Hal, S. (2013). The Prevention and Treatment of Missing Data in Clinical Trials. *N Engl J Med*, 367(14), 1355–1360
- Rohana, K., & Tajul Ariffin, M. (2010). Sources of Growth in the Manusfacturing Sector in Malaysia: Evidence from Ardl and Structural Decomposition Analysis. *Asian Academy of Management Journal*, 15(1), 99–116.
- Rossiter, J. R. (2002). The Coarse Procedure for Scale Development in Marketing. *International Journal of Research in Marketing*, 19, 305 335.
- Rothbard, N. P. (2001). Enriching or Depleting? The Dynamics of Engagement in Work and Family Roles. *Administrative Science Quarterly*, 46 (4), 655-684.
- Rotundo, M., & Sackett, P. R. (2002). The Relative Importance of Task, Citizenship, and Counterproductive Performance to Global Ratings of Job Performance: A Policy-Capturing Approach. *Journal of Applied Psychology*, 87(1), 66-80
- Runhaar, P. (2017). How Can Schools and Teachers Benefit from Human Resources Management? Conceptualising HRM from Content and Process Perspectives. *Educational Management Administration and Leadership*, 45(4), 639–656.
- Ryan, R. M., Kuhl, J., & Deci, E. L. (1997). Nature And Autonomy: Organizational View Of Social and Neurobiological Aspects Of Selfregulation in Behavior and

- Development. Development And Psychopathology, 9, 701-728.
- Saks, A. M. (2006). Antecedents and Consequences of Employee Engagement. *Journal of Managerial Psychology*, 21(7), 600–619.
- Saleem, I. (2014). Do Human Resource Practices Affect Employee Performance? *Pakistan Business Review*, 15(4), 669–688.
- Sattar, T., Ahmad, K., & Hassan, S. M. (2015). Role of Human Resource Practices in Employee Performance and Job Satisfaction with Mediating Effect of Employee Engagement. *Pakistan Economic and Social Review*, *53*(1), 81–96.
- Saunders, M., Lewis, P. and Thornhill, A. (2007). *Research Methods for Business Students*. 4th Edition, Financial Times Prentice Hall, Edinburgh Gate, Harlow.
- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Chapter 4: Understanding Research Philosophy and Approaches to Theory Development*. Research Methods for Business Students.
- Schaufeli, W.B. and Bakker, A.B. (2003). *UWES-Utrecht Work Engagement Scale:*Test Manual, Department of Psychology. Utrecht University, Utrecht
- Schaufeli, W. B., & Bakker, A. B. (2010). *Defining and Measuring Work Engagement: Bringing Clarity to the Concept.* In A. B. Bakker (Ed.) & M. P. Leiter, Work engagement: A Handbook of Essential Theory and Research (pp. 10-24). New York, NY, US: *Psychology Press*.
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The Measurement of Engagement and Burnout: A Two Sample Confirmatory Factor Analytic Approach. *Journal of Happiness Studies*: An Interdisciplinary Forum on Subjective Well-Being, 3(1), 71-92.
- Schoorman, F.D., Mayer, R.C., Davis, J.H., (2007). An Integrative Model of Organizational Trust: Past, Present, And Future. *Acad. Manage. Rev.* 32 (2), 344–354.
- Schumacher, S. (2009). *High Potential Employees*. Rock Products. New York: Prism Business Media
- Sekaran, U. and Bougie, R. (2013). *Research Methods for Business: A Skill-Building Approach*. 6th Edition, Wiley, New York
- Sendawula, K., Kimuli, S. ., Juma, B., & Grace, N. . (2018). Training, Employee Engagement and Employee Performance: Evidence from Uganda's Health Sector. *Cogent Business and Management*, *5*(1), 1–12.
- Shantz, A., Alfes, K., Truss, C., & Soane, E. (2013). The Role of Employee

- Engagement in the Relationship between Job Design and Task Performance, Citizenship and Deviant Behaviours. *The International Journal of Human Resource Management*, 24(13), 2608–2627
- Sheikh Khairuddin, S. M. H. (2015). Stress and Individual Work Performance Among Interns in a Malaysian Technical University. *Australian Academy of Business and Economics Review*, *I*(2), 1–20.
- Sherman, B., & Snell, A. (1998). *Managing Human Resources, Incentives and Rewards*, International Publishing, Ohio.
- Shuck, B., Reio Jr, T. G., & Rocco, T. S. (2011). Employee Engagement: An Examination of Antecedent and Outcome Variables. *Human Resource Development International*, *14*(4), 427–445.
- Shum, C., Gatling, A., & Shoemaker, S. (2018). A Model of Hospitality Leadership Competency for Frontline and Director-Level Managers: Which Competencies Matter More? *International Journal of Hospitality Management*, 74, 57–66.
- Shuttleworth, A. (2004). Managing Workplace Stress: How Training Can Help. *Industrial and Commercial Training*, Vol. 36 No. 2, pp. 61-65.
- Skorková, Z. (2016). Competency Models in Public Sector. *Procedia Social and Behavioral Sciences*, 230, 226–234.
- Smith, A.J., Thurkettle, M.A., & dela Cruz, F.A. (2004). Use of Intuition by Nursing Students: Instrument Development and Testing. *Journal of Advanced Nursing*, 47, 614–622.
- Smith, G., Minor, M., & Brashen, H. (2018). Spiritual Leadership: A Guide to a Leadership Style that Embraces Multiple Perspectives. *Journal of Instructional Research*, 7(1), 80–89.
- Soane, E., Truss, C., Alfes, K., Shantz, A., Rees, C., & Gatenby, M. (2012). Development and Application of a New Measure of Employee Engagement: the ISA Engagement Scale. *Human Resource Development International*, 15(5), 529–547.
- Song, J. H., Lim, D. H., Kang, I. G., & Kim, W. (2014). Team Performance in Learning Organizations: Mediating Effect of Employee Engagement. *Learning Organization*, 21(5), 290–309.
- Sparrow, P.R. (1998). Reappraising Psychological Contracting. *International Studies* of Management and Organisation Journal, Vol. 28 No. 1, pp. 30–63
- Sparrow, P. R. (2007). Globalization of HR at Function Level: Four UK-Based Case

- Studies of the International Recruitment and Selection Process. *International Journal of Human Resource Management*, 18: 845–867.
- Spector, P. E., Fox, S., Penney, L. M., Bruursema, K., Goh, A., & Kessler, S. (2006). The Dimensionality of Counterproductivity: Are All Counterproductive Behaviors Created Equal? *Journal of Vocational Behavior*, 68(3), 446-460.
- Srinivasan, V., & Chandwani, R. (2014). HRM Innovations in Rapid Growth Contexts: The Healthcare Sector in India. *International Journal of Human Resource Management*. Taylor & Francis.
- Stone, M. (1974). Cross Validatory Choice And Assessment Of Statistical Predictions, *Journal of the Royal Statistical Society*, 36, 2, 111-147
- Subramaniam, C., Shamsudian, F. M., & Ibrahim, H. (2013). Linking Human Resource Management Practices and Organizational Performance: Evidence from Small and Medium Organizational in Malaysia. *Pengurusan Journal*, *32*, 27–37.
- Sujatha, R., & Krishnaveni, R. (2018). Knowledge Creating as a Determinant of Work Performance of Employees: An Empirical Analysis Among Pump Manufacturing Firms in South India. *Asia Pacific Management Review*, 23(1), 45–52.
- Suresh, N., & Lai Yew, W. (2010). Migration and Development in Malaysia: The Impact of Immigrant Labour on the Manufacturing Sector, 1986-2010. Proceeding National Population Conference on the Inter-Relationship between Population Dynamics and Development, 1–35.
- Swisher, V. (2013). Learning agility: The X Factor in Identifying and Developing Future Leaders. *Industrial and Commercial Training*, 45(3), 139–142.
- Tabachnick, B.G. and Fidell, L.S. (2001). *Using Multivariate Statistics*. 4th Edition, Allyn and Bacon, Boston.
- Tauhed, S. Z., Rasdi, R. M., Samah, B. A., & Ibrahim, R. (2018). The Influence of Organizational Factors on Work Engagement Among Academics at Malaysian research universities. *International Journal of Academic Research in Business* and Social Sciences, 8(10), 973–988.
- Thompson, P.J. (1995). Competence-based learning and qualifications in the UK. *Accounting Education*, Vol. 4 No. 1, pp. 5-15
- Tian, A. W., Cordery, J., & Jos, G. (2016). Staying and Performing: How Human Resource Management Practices Increase Job Embeddedness and Performance.

- Personnel Review, 45(5), 947–968.
- Torrington, D., Hall, L., Taylor, S. and Atkinson, C. (2014). *Human Resource Management*. 9th ed. Pearson.
- Unnikrishnan, S. (2016). The Effect of Managerial Competencies on Employee Engagement in Multinational IT Industries. *International Journal of Latest Trends in Engineering and Technology*, 7(3), 28–34.
- Urbach, N., & Ahlemann, F. (2010). Structural Equation Modeling in Information Systems Research Using Partial Least Squares. *Journal of Information Technology Theory and Application*, 11(2), 5–40.
- Van Scotter, J.R. and Motowidlo, S.J. (1996). Interpersonal Facilitation and Job Dedication as Separate Facets of Contextual Performance. *Journal of Applied Psychology*, Vol. 81 No. 5, pp. 525-53
- Velciu, M. (2017). Job Matching as a New Challenge for Work Performance. *Balkan Region Conference on Engineering and Business Education*, 3(1), 14–19.
- Venkatraman, N. (1989). The Concept of Fit in Strategy Research: Toward Verbal and Statistical Correspondence. *The Academy of Management Review*, 14(3), 423-444.
- Viswesvaran, C. and Ones, D.S. (2000). Perspectives on Models of Job Performance. *International Journal of Selection and Assessment*, Vol. 8 No. 4, pp. 216-226.
- Vosloban, R. I. (2013). The Influence of the Employee's Performance on the Company's Growth A Managerial Perspective. *Procedia Economics and Finance*, *3*(12), 660–665.
- Wesselink, R., Blok, V., Van, S., Lans, T., & Dentoni, D. (2015). Individual Competencies for Managers Engaged in Corporate Sustainable Management Practices. *Journal of Cleaner Production*, *106*, 497–506.
- World Economic Forum. (2018). Insight Report: Readiness for the Future of Production Report 2018. *World Economic Forum*.
- Wright, P.M., McCormick, B., Sherman, W.S. & McMahan, G.C. (1999) The Role of Human Resource Practices in Petro-Chemical Refinery Performance. International Journal of Human Resource Management, 10, 551–71
- Yang, S.C. and Farn, C.K. (2009). Social Capital, Behavioural Control, and TacitKnowledge Sharing A Multi-Informant Design. *International Journal of Information Management*, Vol 29, No. 3, pp 210-218
- Yaşar, M. F., Ünal, Ö. F., & Zaim, H. (2013). Analyzing the Effects of Individual

- Competencies on Performance: A Field Study in Services Industries in Turkey. *Journal of Global Strategic Management*, 2(7), 67–67.
- Yu, S., & Ko, Y. K. (2017). Communication Competency as a Mediator in the Self-Leadership to Job Performance Relationship. *Collegian*, 24(5), 421–425.
- Zainal Aznam, Y., & Deepak, B. (2015). Economic Growth and Development in Malaysia: Policy Making and Leadership. *Economic Growth and Development in Africa* (Vol. 27).
- Zakariah, S. H., Zainal, A., & Shariff, F. M. (2018). Enhancing the Role of Innovation towards Employee Job Performance at Malaysian Hotels. International Journal of Acaemic Research in Business & Social Sciences, 8(15), 146–159.
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2010). *Business Research Methods* (8th ed.). Mason, HO: Cengage Learning.
- Zirwatul Aida R, I., Ohtsuka, K., Dagang, M. M., & Bakar, A. A. (2014). Job Satisfaction Among Malaysian Employees: An Application of Spector's Job Satisfaction Survey in the South East Asian Context. *Jurnal Pengurusan*, 41(4), 69–79.

LIST OF PUBLICATIONS

Indexed Journal

 Othman, S.A. & Nik Mahmood, N.H. (2019) Linking Employee Engagement towards Individual Work Performance through Human Resource Management Practice: From High Potential Employee's Perspectives. Management Science Letters, 9(7). (pp.1083-1092)

(Published, Indexed by SCOPUS)

 Harun, N. H., Mahmood, N. H. N., & Othman, S. A. (2019). The Effectiveness of Talent Management Practice among Teachers in Malaysia. International Journal of Academic Research in Business and Social Sciences, 9(6), 1104–1120.

(Published, Indexed by ERA)

3. Harun, N. H., Mahmood, N. H. N., & **Othman, S. A.** (2019) The Effect of Talent Management Factors On Teacher's Leadership at the Secondary Schools. *Management Science Letters*, 10

(Accepted for Publication, Indexed by SCOPUS)

Conference Proceedings

 Othman, S.A. & Nik Mahmood, N.H. (2016) Leveraging Employee Engagement towards Individual Work Performance in Malaysia Manufacturing Industry. 3rd International Multidisciplinary Scientific Conference on Social Sciences and Arts, SGEM Bulgaria. (pp.589-596)

(Published, Indexed by WOS)