Kurdish Studies
Jan 2024
Volume: 12, No: 1, pp. 3122-3143
ISSN: 2051-4883 (Print) | ISSN 2051-4891 (Online)
www.KurdishStudies.net

Received: October 2023 Accepted: December 2023
DOI: https://doi.org/10.58262/ks.v12i1.226

Factors Affecting Talent Retention to Ensure Sustainable Growth in the Automation Industry in Penang Free Industrial Zone

Lay Kam Fei[1], Majid Bin Md. Isa[2], Bijay Sigdel[3], Abdul Rahman Bin S Senathirajah[4], Shaikhah Al-Ainati[5], Rasheedul Haque[6], Syriac Nellikunel Devasia[7]

Abstract

This study investigates the factors affecting talent retention in the automation industry in Penang Free Industrial Zone. The conceptual model, which is based on the Social Exchange Theory, includes four key components: work-life balance, job satisfaction, reward management and career progression. A structured survey was implemented to collect data after a comprehensive literature review. Responses from 364 participants who were purposively sampled for this study were collected. The significance of the study model was evaluated using multicollinearity and multiple regression analysis. The research reveals important managerial insights for the automation industry, including enabling the allocation of resources and the development of strategies that take into consideration the impact of different work environment. Notably, this study fills a gap in the literature on Malaysia's automation industry, making it particularly helpful. The discussion section explores at relevant applications to help managers improve work environments for better talent retention. Recognising limitations such as self-reported data and the cross-sectional character of the study, this paper suggests future research directions. In conclusion, this study highlights the significant impact that work environment have on talent retention in Malaysia's automation industry leading towards a sustainable growth providing insightful advice for practitioners and inspiring further study in this field.

Keywords: *Talent Retention, Work-life Balance, Job Satisfaction, Reward Management, Career Progression, Free Industrial Zone, Automation Industry.*

1. Introduction

1.1 Research Background

The Free Industrial Zone (FIZ) in Malaysia, specifically the automation industry in the Penang Free Industrial Zone, is the focus of this study. The term "automation" refers to the use of machines and computers to perform tasks traditionally done by humans, offering consistent,

[1] MBA Candidate, INTI International University, Malaysia, Email: i22022977@student.newinti.edu.my
Orcid: orcid.org/0009-0003-3871-3436
[2] Professor, Faculty of Education and Liberal Arts (FELA), INTI International University, Persiaran Perdana BBN Putra Nilai, 71800 Nilai, Negeri Sembilan, Malaysia, Email: abdmajid.mdisa@newinti.edu.my
[3] Faculty of Management, Shinawatra University, Thailand, *Corresponding author, Senior Lecturer, Faculty of Business and Communications. Orcid: orcid.org/0000-0001-6044-9051
[4] INTI International University, Persiaran Perdana BBN Putra Nilai, 71800 Nilai, Negeri Sembilan, Malaysia
Email: arahman.senathirajah@newinti.edu.my
[5] Business Department, College of Business Studies, PAAET, Kuwait, Orcid: orcid.org/0000-0001-8170-5413
[6] Associate Professor, Faculty of Business, Hospitality, Accounting and Finance (FBHAF), MAHSA University, Malaysia
Email: rasheedul@mahsa.edu.my
[7] Faculty of Business, Economics and Finance, Perdana University,Malaysia, Email: syriac@perdanauniversity.edu.my

measurable, and repeatable services at reduced costs (Oxford University Press, 2023). The "automation industry" involves the use of control systems, such as computers or robots, and information technologies to manage various processes and machinery in an industrial context (Othman et al., 2016). This technology is considered a fundamental driver of Industry 4.0, the fourth industrial revolution, with the automation industry playing a critical role in providing solutions for smart factories and intelligent production processes. The incorporation of Internet of Things (IoT) capabilities is a significant component of Industry 4.0, enabling greater connectivity and efficiency in production processes (Koh and Manuel, 2020). The automation industry in Malaysia, particularly in Penang, has experienced substantial growth, with the number of factory automation companies more than doubling from 2010 to 2020 (Syafiq, 2022). Penang's automation industry has seen significant growth recently, with a comprehensive supply chain in the machinery and equipment (M&E) and automation sectors. Local companies, including Greatech, Pentamaster, and UWC, have played a pivotal role in this expansion, with their combined market capitalization reflecting their significant presence. Continuous investment, job creation, and a focus on emerging industries underscore Penang's appeal as a hub for automation (Dermawan, 2021). Talent retention has a strong impact on customer satisfaction. Determinants of customer satisfaction have been studied in numerous research attesting to its importance (Faisal et al, 2020; Haque et al., 2020; Nellikunnel et al. 2017; Nellikunnel et al., 2015; Rahman et al., 2011; Rahman et al., 2017; Rahman et al., 2018; Yi et al.,2018). Customer satisfaction is a key driver for an organization's success (Adetayo et al., 2022; Fu et al., 2022, nathirajah et al., 2022; Li et al., 2022; Hailong et al., 2022a; Hailong et al., 2022b)

1.1 Problem Statement

Employee turnover is a significant issue in South East Asia (SEA), with 79% of professionals considering leaving their jobs in the past year, according to Tan (2023). However, 42% ended up staying due to lack of better job prospects, limited opportunities, and concerns about the culture and job security at potential new workplaces. In Malaysia, the situation is even more severe, with 82% of professionals contemplating a job change, but 39% chose to stay for similar reasons. There is a growing emphasis on mental and physical well-being, and flexible work schedules have become a priority. However, 45% of employees reported no noticeable changes in their companies' talent retention strategies. Looking forward, 77% of professionals are confident about job prospects in their sectors, and changes in job responsibilities and management are key factors in their decision to stay or leave. A significant 81% would reconsider resigning if conditions were favorable. Talent management is crucial in Small and Medium Enterprises (SMEs) in Malaysia, with effective practices leading to higher employee engagement and retention (Ismail et al., 2021). Competitive remuneration packages, career progression opportunities, positive organisational culture, and flexible work arrangements can enhance talent retention (Ott et al., 2018). Job satisfaction, organisational commitment, work-life balance, and perceived organisational support significantly impact employee retention (Mahadi et al., 2020). However, the advent of Artificial Intelligence (AI) in the automation industry has changed job roles and skill requirements, leading to a widening skill gap. Employees lacking AI proficiency may experience decreased job satisfaction, lower morale, and increased job insecurity, potentially leading to higher turnover rates. The rapid pace of AI development could further widen this skill gap if proactive measures are not taken, presenting a pressing problem for talent retention in the automation industry (Kim-Schmid & Raveendhran, 2022). The finding of this study can be extended to SMES as SMEs play a key role in a country's economy (Ahmed et al., 2022a, Ahmed et al., 2022b, Chowdhury et al., 2022,

Khalil et al., 2022a & Khalil et al., 2022b).

1.2 Research Gap

While there is extensive research on talent retention in various countries and industries (Foong et al., 2015; Ibidunni et al., 2016; Kaur, 2017; Olckers & Plessis, 2015; Plessis & Sukumaran, 2015; Shah & Jumani, 2015), there is a noticeable gap in the literature regarding talent retention in specific regions like Klang Valley and Penang in Malaysia. This suggests that additional research is needed to gain a more comprehensive understanding of talent retention practices and challenges in these regions. Furthermore, there is a lack of research focusing on the automation industry in the Penang Free Industrial Zone. Previous studies have explored talent retention across different industries such as finance (Nagarajan, 2016), IT (Satpal, 2016), education (Shah & Jumani, 2015), healthcare (Darkwa et al., 2015), and automobile (Mandhanya, 2015). However, the unique context of the automation industry in the Penang Free Industrial Zone has not been adequately addressed, indicating a need for more focused research in this area.

1.3 Research Objectives

The main objectives of this study are:

RO1: To examine whether work-life balance effects talent retention in the automation industry in Penang Free Industrial Zone.

RO2: To examine whether job satisfaction effects talent retention in the automation industry in Penang Free Industrial Zone.

RO3: To examine whether reward management effects talent retention in the automation industry in Penang Free Industrial Zone.

RO4: To examine whether career progression effects talent retention in the automation industry in Penang Free Industrial Zone.

RO5: To examine the relationship between the independent variables (work-life balance, job satisfaction, reward management and career progression) on talent retention in the automation industry in Penang Free Industrial Zone.

2. Literature Review

2.1 Malaysia Prespective on Talent Retention

Malaysia's journey towards becoming a high-income nation requires a substantial pool of highly skilled and globally competitive talents, with the current workforce falling short of meeting the demand for more skills-intensive labour (Jefri & Daud, 2016; Nagarajan, 2016). In the Malaysian manufacturing sector, key factors impacting talent retention include training and development, reward management, work environment, and work-life balance (Foong et al., 2015). However, talent retention is sometimes viewed negatively, as demonstrated by the rise in employee turnover rates (Latif & Saraih, 2016). Studies focused on the Malaysian manufacturing and financial sectors identified job satisfaction and career development as key factors affecting talent retention (Chin, 2018; Nagarajan, 2016). The emergence of new foreign banks has spurred advancements in service delivery, making talent retention a critical consideration. However, none of the individual dimensions of talent retention strategies had a significant correlation with the intention of talents to stay with their organisations (Nagarajan,

2016). Research in the Malaysian manufacturing industry identified several factors, such as learning and development opportunities, total rewards, the quality of the working environment, and work-life balance, as having a significant impact on talent retention (Foong et al., 2015). Talent retention in Malaysia is portrayed as a complex issue, with competing organisations actively trying to attract key talents with enticing offers, recognising the value of securing intellectual capital for competitive advantage (Latif & Saraih, 2016; Othman et al., 2017).

2.2 Conceptual Framework

2.2.1 Social Exchange Theory

This study outlines the significance of two prominent theories, Equity Theory and Social Exchange Theory (SET), in understanding talent retention dynamics. It delineates how the Equity Theory, focusing on fairness in inputs and outcomes, contrasts with the broader framework of the Social Exchange Theory. The latter theory encompasses a wider spectrum of factors influencing employee decisions to remain within an organization. In the context of this study, Social Exchange Theory emerges as the primary theoretical lens due to its comprehensive approach in balancing benefits and costs, including those highlighted by Equity Theory. The subsequent section elaborates on the application of SET within the automation industry in Malaysia's Penang Free Industrial Zone. It explores the tenets of SET, emphasizing the norm of reciprocity in relationships and its relevance in elucidating talent retention dynamics. The text underscores the bifurcation of SET into reciprocal and non-reciprocal exchanges, detailing how talents reciprocate the value provided by employers through continued employment. The importance of proactive relationship management, information exchange, and factors like reward management, career progression, work-life balance, and job satisfaction are highlighted within the context of talent retention. The text elucidates how these factors, explored as independent variables, influence talent retention, the dependent variable, within the framework of SET. Overall, the text emphasizes SET's relevance and its potential to offer a comprehensive framework for understanding talent retention in the automation industry. It underscores how talents' perceived 'values' in the workplace align with the principles of SET and posits that these factors collectively influence talent retention within this specific context.

2.3 Research Framework

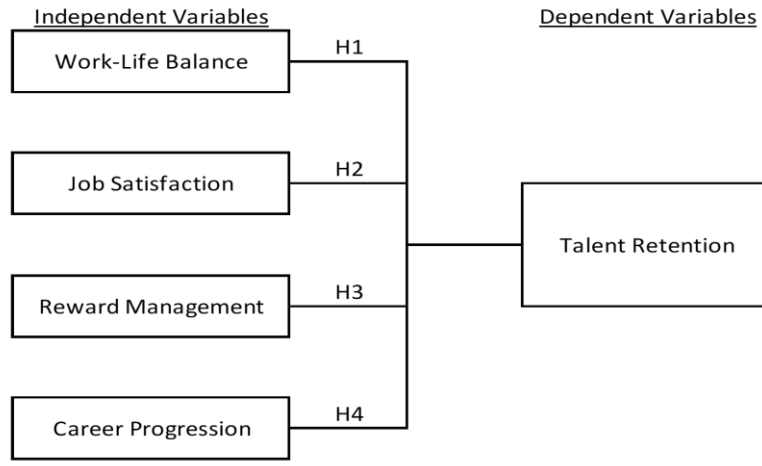

Figure 2.1: Conceptual Framework on Talent Retention.

2.4 Hypothesis Development

2.4.1 Work-Life Balance has a Positive and Significant Relationship with Talent Retention in the Automation Industry in Penang Free Industrial Zone

Work-life balance significantly influences talent retention within the automation industry in Penang Free Industrial Zone. This hypothesis posits that the ability of employees to maintain a balance between their work and personal life is a key determinant in their decision to remain with their current employer. An organizational culture that encourages flexibility and aids employees in managing their professional and personal obligations is anticipated to positively affect talent retention. On the other hand, a lack of initiatives promoting work-life balance may result in increased turnover rates as employees seek roles that provide a better equilibrium between their work and personal lives.

Thus, this research proposes the following hypothesis.:

H1: *Work-life balance has a positive and significant relationship with talent retention in the automation industry in Penang Free Industrial Zone.*

2.4.2 Job Satisfaction has a Positive and Significant Relationship with Talent Retention in the Automation Industry in Penang Free Industrial Zone

H2 asserts that job satisfaction holds substantial sway over talent retention in the automation industry in Penang Free Industrial Zone. This hypothesis suggests that employees who are content with their jobs, work environment, and overall employment experience are more likely to remain loyal to their current organisation. Job satisfaction is often linked to factors such as work engagement, positive relationships with colleagues and supervisors, and a sense of fulfillment in one's role. Organisations that prioritize measures to enhance job satisfaction are expected to experience lower turnover rates, as satisfied employees are less inclined to seek alternative employment opportunities.

Thus, this research proposes the following hypothesis:

H2: *Job satisfaction has a positive and significant relationship with talent retention in the automation industry*

in Penang Free Industrial Zone.

2.4.3 Reward Management has a Positive and Significant Relationship with Talent Retention in the Automation Industry in Penang Free Industrial Zone

H3 proposes that reward management significantly influences talent retention in the automation industry in Penang Free Industrial Zone. This hypothesis underscores the importance of an effective rewards system in retaining valuable talent. It posits that employees are more likely to stay with an organisation that offers competitive and appealing rewards, which may include financial incentives, benefits, recognition, and career development opportunities. A well-structured reward management system that aligns with employees' needs and expectations is expected to foster loyalty and reduce turnover rates. Conversely, a lack of attractive rewards may drive talented individuals to explore opportunities elsewhere.

Thus, this research proposes the following hypothesis:

H3: *Reward Management has a positive and significant relationship with talent retention in the automation industry in Penang Free Industrial Zone.*

2.4.4 Career Progression has a Positive and Significant Relationship with Talent Retention in the Automation Industry in Penang Free Industrial Zone

Career progression significantly impacts talent retention in the automation industry in Penang Free Industrial Zone. This hypothesis underscores the importance of career development opportunities in retaining employees. It suggests that organisations offering clear career advancement paths, opportunities for skill development, and professional growth are more likely to retain their talented employees. Employees who envision a future within their current organisation, with chances for skill development and upward mobility, are less likely to look for opportunities elsewhere. Conversely, a lack of career progression opportunities may lead to dissatisfaction and ultimately result in talent attrition.
Thus, this research proposes the following hypothesis:

H4: *Career Progression has a positive and significant relationship with talent retention in the automation industry in Penang Free Industrial Zone.*

2.4.5 All the Independent Variables Jointly have a Positive and Significant Effect on Talent Retention in the Automation Industry in Penang Free Industrial Zone

H5 posits that there is no single dominant factor affecting talent retention in the automation industry in Penang Free Industrial Zone. This hypothesis suggests that talent retention is a multifaceted issue, influenced by a combination of factors including work-life balance, job satisfaction, reward management, and career progression. It underscores the complexity of talent retention and the need for a holistic approach in addressing it. While certain factors may have a more pronounced impact in specific contexts or among certain employee groups, this hypothesis proposes that no single factor universally dominates across all contexts and employee groups in the automation industry in Penang Free Industrial Zone.
Thus, this research proposes the following hypothesis:

H5: *All the independent variables jointly have a positive and significant effect on talent retention in the automation industry in Penang Free Industrial Zone.*

3. Data Collection Method

This study investigates the influence of work-life balance, job satisfaction, reward management, and career progression on talent retention within the automation industry in the Penang Free Industrial Zone. In order to complete this study, the researcher selected a quantitative data collection method commonly used in many studies (Wider,2023, Jiang et al., 2023).The research design is a quantitative descriptive analysis focusing on employees in automation companies situated in this area (Sekaran & Bougie, 2016). Data was collected through a questionnaire distributed via Google Forms, chosen to minimize disruption to the participants' regular work activities. The study was conducted over a seven-week period from October to November 2023. The unit of analysis is individuals because the research focuses on talent retention, and the individuals, specifically the talented employees, constitute the population of interest (Zikmund et al., 2003). The population of interest was the employees of seven listed and several non-listed automation companies in the area, totaling approximately 4000 individuals (Bursa Malaysia company list, 2023). A sample size of 351 was determined using Krejcie and Morgan's (1970) method to ensure sufficient representation. Convenience sampling was used due to time constraints, allowing for quick data collection. This technique is used by researchers to collect data from a subset of a larger population that is easily accessible and can provide the necessary information (Saunders et al., 2017). The questionnaire, divided into three sections (demographics, talent retention, and the four independent variables), was designed for clarity and ease of response. Each respondent was estimated to require approximately 10 minutes to complete the questionnaire (Hair et al., 2019). A 5-point Likert scale was used to measure agreement levels, enhancing the validity and reliability of results. The scale ranged from "Strongly Agree" (5), "Agree" (4), "Neutral" (3), "Disagree" (2), to "Strongly Disagree" (1) (Dawes, 2008; Morad et al., 2021; Joshi et al., 2015). A pilot study was conducted with the first 40 respondents to assess the questionnaire's reliability and validity, ensuring its effectiveness before the main study. The questionnaire was also evaluated by experts and academicians to identify potential errors (Kothari, 2004; Shuttleworth, 2015; Malhotra, 2006; Yusoff et al., 2021). This rigorous methodology ensures the study's findings are reliable and can contribute to enhancing talent retention strategies in the automation industry.

4. Data Analysis

This part presents the study's findings derived from a thorough analysis of the collected data using Microsoft Excel and SPSS version 29. The analysis methods include descriptive analysis, principal component analysis, Pearson's correlation analysis, regression analysis, and analysis of variance. The reliability of the research tools was also evaluated. The aim is to provide a comprehensive understanding of the results.

4..1 Demographics Data

The demographic characteristics of the survey participants encompass their gender, age, the company they currently work for, and the duration of their tenure at their current company.

Table 4.1: Demographic Profile of the Respondents (N=109).

Variable	Frequency (n)	Percentage (%)
Gender		
Male	259	71.2
Female	105	28.8
Age		

20 ~ 29 years old	151	41.5
30 ~ 39 years old	166	45.6
40 ~ 49 years old	34	9.3
≥ 50 years old	13	3.6
Company		
Aemulus	163	44.8
Pentamaster	61	16.8
Greatech	38	10.4
SRM	12	3.3
Vitrox	12	3.3
Leadman		
NSW	7	1.9
TTOT	7	1.9
JHM		
MMSV	6	1.6
Stratus	6	1.6
Others	39	10.7
Length of Service		
≤ 2 years	163	44.8
3 ~ 5 years	137	37.6
6 ~ 10 years	57	15.7
11 ~ 15 years	6	1.6
≥ 16 years	1	0.3

An exhaustive online survey was conducted, involving 364 professionals from automation firms located in the Penang Free Industrial Zone. Every participant filled out the questionnaire completely, resulting in a dataset devoid of missing or incomplete entries. This thoroughness negates the necessity for data cleaning, ensuring that the data is dependable and primed for an in-depth analysis.

The gender distribution of the respondents reveals a male majority, with 259 males (71.2%) and 105 females (28.8%). The age distribution of the respondents is as follows: 151 individuals (41.5%) are between 20 - 29 years old, 166 (45.6%) are between 30 - 39 years old, 34 (9.3%) are between 40 - 49 years old, and 13 (3.6%) are 50 years and above.

The majority of the survey respondents, amounting to 163 individuals (44.8%), were employed at Aemulus. Pentamaster was represented by 61 respondents (16.8%), and Greatech had 38 respondents (10.4%). The remaining respondents were from various other companies.

Regarding the length of service, 163 respondents (44.8%) had been working for 2 years or less. There were 137 respondents (37.6%) who had been working between 3 to 5 years. A total of 57 respondents (15.7%) had a service length of 6 to 10 years. There were 6 respondents (1.6%) with a service length of 11 to 15 years, and only 1 respondent had been serving their company for more than 16 years. This distribution suggests a slight bias towards respondents with shorter tenures. This solid foundation allows the researcher to confidently proceed with the research.

4..2 Reliability Test

Reliability analysis, a key concept in psychometrics, statistics, and research, evaluates the consistency of a measure. It examines the measure's capacity to produce stable and consistent results when repeated under the same conditions (Forster, 1998).

Table 4.2: Reliability Analysis Results.

Variable	Cronbach's Alpha	Decision
Talent Retention (DV)	0.89	Very Good
Work-Life Balance (IV1)	0.93	Very Good

Job Satisfaction (IV2)	0.92	Very Good
Reward Management (IV3)	0.93	Very Good
Career Progression (IV4)	0.90	Very Good

The dependent variable, Talent Retention, has a high internal consistency with a Cronbach's Alpha of 0.89, indicating that the items measuring talent retention are interconnected and measure the same concept. The independent variables also exhibit high Cronbach's Alpha values: Work-Life Balance at 0.93, Job Satisfaction at 0.92, Reward Management at 0.93, and Career Progression at 0.90. These values suggest excellent internal consistency, implying that the items in each scale effectively measure their respective concepts. Therefore, the scales used in this study to measure these variables are reliable, and the results obtained are likely to be valid and consistent. The reliability test results further confirm that the measures have high internal consistency, meaning that the items measure the same concept. The reliability coefficients are 0.7 and above, which is acceptable for preliminary research (Nunnally, 1978) and suitable for basic research (Kaplan & Saccuzzo, 1982). Hence, the measures are reliable and can produce consistent results.

4..3 Descriptive Analysis

Descriptive analysis provides essential quantitative summaries of the data involved in a study, forming the foundation of statistical investigation. It includes the examination of the data's shape and distribution, encompassing measures of skewness and kurtosis. These elements are vital in determining how much the data deviates from or aligns with a normal distribution, which subsequently influences the selection of additional statistical tests. The results of the descriptive analysis of the variables are presented in the table below.

Table 4.3: Descriptive Statistics Results.

Variable	Mean	Std Deviation	Skewness	Kurtosis	Distribution
Talent Retention (DV)	2.71	0.89	0.16	-0.64	Normal
Work-Life Balance (IV1)	2.85	1.03	-0.10	-0.81	Normal
Job Satisfaction (IV2)	3.15	0.94	-0.20	-0.40	Normal
Reward Management (IV3)	2.89	0.99	-0.16	-0.69	Normal
Career Progression (IV4)	2.95	0.91	0.13	-0.59	Normal

The dependent variable, Talent Retention, has a mean score of 2.71, indicating a low average level of talent retention among the employees. The standard deviation of 0.89 suggests moderate deviation from the mean. The skewness value of 0.16 and the kurtosis value of -0.64 suggest a normal distribution (George & Mallery, 2010). The independent variables, Work-Life Balance, Job Satisfaction, Reward Management, and Career Progression, have mean scores of 2.85, 3.15, 2.8923, and 2.95 respectively, indicating varying average levels among the employees. The standard deviations suggest moderate deviation from the mean for all variables. The skewness and kurtosis values for all variables are within the range of ± 2, suggesting a normal distribution for all variables (George & Mallery, 2010). These results provide a comprehensive understanding of the variables under study. All variables exhibit a normal distribution, indicating that the data points predominantly cluster around the mean value. This type of distribution enables the application of numerous statistical tests that require the assumption of normality (Field, 2009). The mean values for Work-Life Balance, Job Satisfaction, Reward Management, and Career Progression exceed that of Talent Retention. This discrepancy prompts further exploration. Hence, we will employ factor analysis techniques, specifically the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's Test, for a more nuanced understanding.

4..4 Factor Analysis

Factor analysis, a statistical method, uncovers underlying dimensions or factors accounting for relationships among variables. The suitability of data for this technique is assessed using the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's Test of Sphericity.

Table 4.4: Kaiser-Meyer-Olkin and Barlett's Test.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**0.93**
Bartlett's Test of Sphericity	Approximate Chi-Square	9794
	Degree of freedom (df)	300
	Significant (Sig.)	<.001

Bartlett's Test contrasts the correlation matrix of the variables with an identity matrix, which implies no relation among the variables. The test result is a chi-square value with degrees of freedom and a p-value. If the p-value is less than 0.05, the researcher can reject the null hypothesis that the correlation matrix is an identity matrix (Kaiser, 1974). This implies that the variables are related and suitable for factor analysis. The KMO measure indicates the degree to which the variables are related and can be grouped into factors. A higher KMO value implies that a greater proportion of variance can be accounted for by factors. According to Kaiser (1974), a KMO value above 0.6 is acceptable, and above 0.7 is good. In this case, the KMO measure was 0.93, which Kaiser (1974) would classify as "Marvelous". This suggests that a very high proportion of the data's variance can be explained by factors, and factor analysis should yield distinct and reliable factor.

4..5 Inferential Analysis

4.5.1 Pearson's Correlation Analysis

Pearson's Correlation Analysis measures the linear relationship between two continuous variables. The correlation coefficients between this research's independent and dependent variables are presented in the below table.

Table 4.5: Pearson's Correlation Analysis.

Variables	**Talent Retention (DV)**	**Work-Life Balance (IV1)**	**Job Satisfaction (IV2)**	**Reward Management (IV3)**	**Career Progression (IV4)**
Talent Retention (DV)	1				
Work-Life Balance (IV1)	0.75	1			
Job Satisfaction (IV2)	0.73	0.692	1		
Reward Management (IV3)	0.76	0.715	0.755	1	
Career Progression (IV4)	0.71	0.632	0.838	0.790	1

a. All Sig. (p value) = <0.001

Pearson's Correlation Analysis reveals significant associations between various work environment aspects and talent retention. All four independent variables - Work-Life Balance ($r = 0.75$, $p < 0.001$), Job Satisfaction ($r = 0.73$, $p < 0.001$), Reward Management ($r = 0.76$, $p < 0.001$), and Career Progression ($r = 0.71$, $p < 0.001$) - show a strong positive correlation with Talent Retention. All correlations have p-values (< 0.001) below the accepted threshold of 0.05, indicating statistical

significance. These findings highlight the interconnectedness of various work environment factors and their collective impact on talent retention. The correlation coefficients between Talent Retention and the independent variables range from 0.707 to 0.761, indicating a strong positive relationship (Schober et al., 2018). This suggests high multicollinearity, which doesn't affect the model's predictive power but complicates individual predictor interpretation. Further analysis using Multicollinearity Statistics is needed for a more nuanced understanding.

4.5.2 Multicollinearity Statistics

Guidelines suggest that a tolerance value under 0.20 or a VIF over 5.0 could signify multicollinearity issues (Garson, 2012; Weisburd, 2021).

Table 4.6: Multicollinearity Statistics.

Variable	Tolerance	Variation Inflation Factors (VIF)
Work-Life Balance (IV1)	0.43	2.31
Job Satisfaction (IV2)	0.25	4.01
Reward Management (IV3)	0.29	3.40
Career Progression (IV4)	0.24	4.18

In this study, all variables demonstrated tolerance values exceeding 0.2 and VIF values below 5.0. Even the higher VIF values for job satisfaction and career progression were 4.01 and 4.18, respectively. These results indicate no significant multicollinearity issues. Therefore, each variable provides unique and valuable information in predicting employee work performance in the manufacturing industry, enhancing the study's validity and reliability.

4.5.3 Multiple Linear Regression

Regression analysis is a statistical method that explores relationships among variables. It creates an equation to represent these relationships, which can be used for prediction, forecasting, or determining causality.

Table 4.7: Multiple Linear Regression. Model Summary.

R	R^2	Adjusted R^2	Std. Error of the Estimate
0.832	0.693	0.689	0.496

a. Predictors: (Constant), Work-Life Balance, Job Satisfaction, Reward Management & Career Progression

Anova.

	Sum of Squares	df	Mean Square	F	Sig
Regression	198.7	4	49.67	202.3	<0.001
Residual	88.14	359	0.246		
Total	286.8	363			

a. Dependent Variable: Talent Retention

b. Predictors: (Constant), Work-Life Balance, Job Satisfaction, Reward Management & Career Progression

Coefficients of Multiple Regression

Model	Unstandardized Coefficient		Standardized Coefficients Beta (ß)	t	Sig. (p value)
	B	Std.Error			
(Constant)	0.243	0.094		2.57	0.01

Work-Life Balance (IV1)	0.309	0.038	0.357	8.05	<0.001
Job Satisfaction (IV2)	0.168	0.056	0.177	3.02	0.003
Reward Management (IV3)	0.262	0.049	0.291	5.40	<0.001
Career Progression (IV4)	0.100	0.058	0.102	1.71	0.088

a. Dependent Variable: Talent Retention

Regression analysis shows a strong correlation between the predictors (Work-Life Balance, Job Satisfaction, Reward Management, Career Progression) and Talent Retention. The model's R is 0.832, indicating a strong relationship. The R^2 and Adjusted R^2 values (0.693 and 0.689) suggest the predictors explain about 69% of the variance in Talent Retention, denoting high predictive accuracy. This aligns with guidelines by Chin (1998) and Henseler et al. (2009), where an R^2 value above 0.67 is considered high.

The ANOVA summary table shows the model significantly accounts for the variance in the dependent variable. The regression sum of squares, 198.686, and the residual sum of squares, 88.141, represent the explained and unexplained variations, respectively. The model's degrees of freedom is 4, and the residual is 359. The mean square values, 49.671 for regression and 0.246 for residual, represent the average variations. The F-value, 202.313, is high, and the associated p-value is less than 0.001, affirming the model's significance and efficacy in explaining the variance in the dependent variable.

Improvements in Work-Life Balance, Job Satisfaction, Reward Management, and Career Progression are associated with increases in Talent Retention. Specifically, a unit enhancement in these areas corresponds to a 0.309, 0.168, 0.262, and 0.100 unit increase in Talent Retention, respectively. These findings suggest that enhancements in these areas are linked with improved Talent Retention. The significance value for Career Progression is 0.088, exceeding the 0.05 threshold, suggesting it may not significantly impact Talent Retention. The researcher plans to exclude Career Progression and re-run the regression with Work-Life Balance, Job Satisfaction, and Reward Management. The goal is to see if these predictors remain positive and significant.

Table 4.8: Multiple Linear Regression-Remove Career Progression.

Model	**Unstandardized Coefficient**		**Standardized Coefficients Beta (ß)**	**t**	**Sig. (p value)**
	B	Std.Error			
(Constant)	0.268	0.093		2.87	0.004
Work-Life Balance (IV1)	0.305	0.038	0.353	7.94	<0.001
Job Satisfaction (IV2)	0.224	0.045	0.236	4.98	<0.001
Reward Management (IV3)	0.298	0.044	0.331	6.75	<0.001

a. Dependent Variable: Talent Retention

These results suggest that improvements in Work-Life Balance, Job Satisfaction, and Reward Management are significantly associated with increases in Talent Retention. The exclusion of Career Progression from the model does not seem to have negatively impacted the model's predictive power.

4..6 Hypothesis Testing

Different degrees of support are given for the proposed hypotheses by the hypothesis testing outcomes. Strong evidence was discovered to support Hypothesis 1 (H1), which postulated that democratic leadership style had a major impact on operational performance in the banking

industry. This is demonstrated by the strong standardized beta coefficient (ß) of 0.436 and a p-value below 0.05, both of which point to a statistically significant positive impact. Hypothesis 2 (H2), on the other hand, which proposed a considerable impact of transformational leadership style on operational performance, was not supported. The absence of a statistically significant influence is indicated by the ß value of 0.168 and a p-value larger than or equal to 0.05. The third hypothesis (H3), which predicted a significant effect of transactional leadership on operational success, was confirmed. The ß value of 0.265 emphasizes a considerable positive correlation, and the p-value, which is less than 0.05, denotes a significant impact.

Table 4.9: Summary of Hypothesis Testing.

Hypotheses	Correlation (r)	p-value	Decision
Hypothesis 1 (H1): Work-life balance has a positive and significant relationship with talent retention in the automation industry in Penang Free Industrial Zone.	0.753	<0.05	Supported
Hypothesis 2 (H2): Job satisfaction has a positive and significant relationship with talent retention in the automation industry in Penang Free Industrial Zone.	0.730	<0.05	Supported
Hypothesis 3 (H3): Reward Management has a positive and significant relationship with talent retention in the automation industry in Penang Free Industrial Zone.	0.761	<0.05	Supported
Hypothesis 4 (H4): Career Progression has a positive and significant relationship with talent retention in the automation industry in Penang Free Industrial Zone.	0.707	<0.05	Supported

Hypotheses	IV	Std Beta (ß)	t-value	p-value	VIF	R^2	Decision
Hypothesis 5 (H5): All the independent variables jointly have a positive and significant effect on talent retention in the automation industry in Penang Free Industrial Zone.	Work-Life Balance	0.353	7.94	<0.05	2.30	0.69	Supported
	Job Satisfaction	0.236	4.98	<0.05	2.61		
	Career Progression	0.331	6.75	<0.05	2.79		

5. Discussion and Conclusion

5.1 Discussions of Findings

The following sections will discuss on the conclusions drawn from the findings:

i. H1: *Work-life balance has a positive and significant relationship with talent retention in the automation industry in Penang Free Industrial Zone.*

The correlation analysis reveals a strong positive relationship ($r = 0.753$, $p < 0.001$) between Work-Life Balance (WLB) and Talent Retention in the automation industry in the Penang Free Industrial Zone. This supports the hypothesis that enhancing WLB significantly improves talent retention. WLB is not just about reduced workloads, but also about enabling task completion while allowing personal relaxation (Foong et al., 2015). This flexibility fosters a positive workplace culture, enhancing commitment and loyalty among employees (Jefri & Daud, 2016). WLB offers numerous benefits, including increased satisfaction, productivity, and reduced absenteeism (Foong et al., 2015). High stress levels can lead to work-life conflict,

negatively impacting satisfaction and productivity (Yadav & Dabhade, 2014). Effective WLB boosts productivity and aids in managing workloads and demands (Rajaram & Keerthika, 2015). In Malaysia, professionals are prioritizing WLB over higher salaries, indicating a shift towards balanced approaches in the workforce (Hasan & Teng, 2017). Organizational support is crucial for successful WLB implementation and talent retention (Achour et al., 2017). Lack of support may lead to failed WLB initiatives and talent attrition. Studies link employees' decisions to stay in an organization with their perception of WLB, emphasizing the need for HR policymakers to establish a conducive environment (Mita et al., 2014). In conclusion, a robust WLB framework significantly impacts talent retention, fostering a balanced work environment that promotes satisfaction, productivity, and overall well-being among employees.

ii. H2: *Job satisfaction has a positive and significant relationship with talent retention in the automation industry in Penang Free Industrial Zone.*

The correlation analysis reveals a strong positive relationship ($r = 0.730$, $p < 0.001$) between Job Satisfaction and Talent Retention in the automation industry in the Penang Free Industrial Zone. This supports the hypothesis that enhancing job satisfaction significantly improves talent retention. Job satisfaction is influenced by factors such as effective communication, a friendly work environment (Jhajharia & Gupta, 2015), supervisor support, and recognition (Yamazakia & Petchdee, 2015; Nagarajan, 2016). Studies across various sectors emphasize the role of reward management, job design, and work-life balance in retention (Mandhanya, 2015; Mertler, 2016; Adusei et al., 2016; Rajathi & Pavithra, 2018). Factors influencing job satisfaction vary across career stages, with early and late-career employees exhibiting higher satisfaction (Mertler, 2016). Addressing work-related factors like job design, compensation fairness, and work-life balance practices is crucial for enhancing job satisfaction and reducing turnover (Desai, 2018).

iii. H3: *Reward Management has a positive and significant relationship with talent retention in the automation industry in Penang Free Industrial Zone.*

The correlation analysis reveals a robust positive association ($r = 0.761$, $p < 0.001$) between Reward Management and Talent Retention in the automation industry in the Penang Free Industrial Zone. This supports the hypothesis that effective reward management significantly improves talent retention. Reward management, including financial and non-financial elements like recognition and job security, significantly impacts talent retention (Pandita & Ray, 2018). Aligning reward systems with organisational objectives is key (Balakrishnan & Vijayalakshmi, 2014). Studies emphasize the value of intrinsic rewards alongside extrinsic ones (Chiekezie et al., 2017). In Malaysia, the evolution of minimum wage legislation aligns with the nation's aspirations (Saari et al., 2016). Financial rewards, especially pay and fringe benefits, significantly impact talent retention (Senasi & Khalil, 2015). Reward management, deemed a "pull-to-stay" factor, warrants investigation for its influence on talent retention (Osman et al., 2015). In conclusion, reward management significantly influences talent retention in Penang's Free Industrial Zone's automation industry. Aligning reward systems with organisational goals and offering competitive compensation are crucial for talent retention (Montosa et al., 2014).

iii. H4: *Career Progression has a positive and significant relationship with talent retention in the automation industry in Penang Free Industrial Zone.*

The correlation analysis reveals a substantial positive association ($r = 0.707$, $p < 0.001$) between Career Progression and Talent Retention in the automation industry in the Penang Free Industrial Zone. This supports the hypothesis that effective career progression strategies

significantly improve talent retention. Career progression strategies involve engaging employees with challenging prospects and training opportunities (Jefri & Daud, 2016; Keenawinna & Sajeevanie, 2015). Employees perceive training as an investment in their career growth (Umamaheswari & Krishnan, 2015). Continuous learning signifies an organisation's value for its employees' capabilities (Saadin, Ramli, & Johari, 2016). Gender biases in career progression exist in certain industries and countries (Keenawinna & Sajeevanie, 2015). Despite biases, women exhibit equal or better capabilities in workplace tasks (Keenawinna & Sajeevanie, 2015). Efforts in Malaysia aim to increase women decision-makers, recognizing their performance (Saadin et al., 2016). In conclusion, career progression significantly influences talent retention in Penang's Free Industrial Zone's automation industry. Further research on the relationship between career progression and talent retention is imperative, especially considering the impact of biases on career advancement.

iii. H5: *All the independent variables jointly have a positive and significant effect on talent retention in the automation industry in Penang Free Industrial Zone.*

The regression analysis reveals that the independent variables - Work-Life Balance, Job Satisfaction, Reward Management, and Career Progression - jointly account for about 69.3% of the variance in talent retention in the automation industry in the Penang Free Industrial Zone, as indicated by the R-squared (R^2) value of 0.693. The analysis of variance (ANOVA) table shows a significantly high F-value of 202.313 and an associated p-value nearly 0.00, falling below the significance threshold of 0.05. This suggests that the predictors jointly have a statistically significant effect on talent retention. However, among the predictors, Work-Life Balance has the most substantial impact on talent retention, followed by Reward Management and Job Satisfaction, as indicated by the magnitude of their standardized coefficients (β). It's important to note that while Career Progression has a positive effect on talent retention ($\beta = 0.102$), its p-value is greater than 0.05, suggesting that this effect is not statistically significant at the 0.05 level. In conclusion, Work-Life Balance, Job Satisfaction, and Reward Management jointly have a positive and significant effect on talent retention in the automation industry in the Penang Free Industrial Zone. While Career Progression also has a positive relationship with talent retention, its effect is not statistically significant. Therefore, H5 is partially supported. These findings provide valuable insights for HR policymakers in the automation industry when developing effective talent retention strategies.

5.2 Implication of the study

5.2.1 Theoretical Implications

This research, based on the Social Exchange Theory, provides insights into talent retention in the automation industry. It reveals that work-life balance, job satisfaction, and reward management significantly influence an employee's decision to stay with a company. Career progression, while not a significant predictor, could be important for certain employee groups. The study introduces AI as a tool for understanding social exchanges. AI can analyze patterns in employee behavior and feedback, helping organizations identify factors that contribute to job satisfaction and talent retention. This aligns with the principles of Social Exchange Theory, where employees weigh the benefits against the costs when deciding whether to stay with an organization. The findings suggest that theoretical models of talent retention should consider a range of factors rather than focusing on single predictors. This study, therefore, contributes to the theoretical understanding of talent retention in the automation industry.

5.2.2 Managerial Implications

The evolving future of work emphasizes the importance of work-life balance in talent retention. Companies that promote work-life balance may gain a competitive edge. Prioritizing job satisfaction can enhance talent retention and employee well-being, creating healthier communities and improved morale. Effective reward management can align with broader stakeholder interests, enhancing a company's reputation. Career progression, while not a significant predictor in this study, can stimulate economic development. Environmental considerations are gaining prominence in talent retention strategies. The automation industry plays a crucial role in the economy, and talent retention is vital for its growth. Managers focusing on work-life balance, job satisfaction, reward management, and career progression can enhance talent retention and contribute to the industry's resilience. AI holds potential to influence talent retention strategies. AI can scrutinize employee data, aiding organizations in identifying factors leading to employee turnover. AI can elevate the employee experience by automating tasks, offering personalized learning opportunities, and promoting better work-life balance. In conclusion, the insights from this study extend beyond talent retention in the automation industry, touching upon broader issues related to future work trends, stakeholder interests, employee well-being, economic development, and environmental sustainability. These insights can guide comprehensive talent retention strategies in today's rapidly evolving world.

5.3 Limitation of the Study

This study investigates the impact of the work environment on talent retention within the automation industry in the Penang Free Industrial Zone, but it's important to note several limitations. First, the findings might be specific to this particular industry and location, and may not be applicable to other sectors or regions. Second, the study's reliance on quantitative data could potentially overlook the complexities of the work environment and its effects on talent retention. A more holistic understanding could be achieved by incorporating qualitative methods. Additionally, there's a possibility of response bias as participants might align their answers with expected outcomes or organizational norms, which could skew the portrayal of the work environment. Lastly, constraints related to time and resources could have limited the scope and sample size of the study, thereby affecting the representativeness of the findings and the ability to draw firm conclusions.

5.4 Recommendations for Future Research

Future studies could expand on this research's findings in several ways. First, using a larger and more diverse sample could enhance the generalizability of the results. This could involve participants from various regions, countries, or industries. Second, conducting longitudinal studies could provide a dynamic perspective on talent retention by tracking changes in attitudes and behaviours over time. The analysis revealed that career progression did not significantly influence talent retention. This observation could also be an area of focus in future research. Understanding why career progression was not deemed significant could provide valuable insights into employee motivation and job satisfaction. Third, additional factors influencing talent retention, such as organisational culture, leadership style, or the impact of emerging technologies like Artificial Intelligence, could be explored. Fourth, employing mixed-methods research that incorporates both quantitative and qualitative data could offer a more nuanced understanding of the issues. Qualitative data, gathered through interviews or focus groups, could provide deeper insights into employees' experiences and perceptions. Finally, future studies could also investigate the effectiveness of various strategies for improving talent retention, thereby providing practical recommendations for organisations. By addressing these areas, future research can continue to enhance our understanding

of talent retention in the automation industry and beyond.

5.5 Conclusion

The research focused on understanding factors that influence talent retention in the automation industry within the Penang Free Industrial Zone. It found that work-life balance, job satisfaction, and reward management significantly impact talent retention. However, career progression, despite showing a positive correlation, did not significantly influence talent retention, indicating an area for further investigation. These findings have important implications for organizations in the automation industry, emphasizing the need to prioritize work-life balance, job satisfaction, and reward management in their talent retention strategies. The study also suggests that these factors contribute to societal well-being and economic growth. Future research should aim to expand the study's scope, consider a more diverse sample, explore additional influential factors, and evaluate the effectiveness of different retention strategies. This study offers valuable insights that can guide organizations in the automation industry towards more effective talent retention strategies, contributing to both individual and organizational success.

References

Achour, M., Khalil, S.A. and Ahmad, B.M.N. et. al. (2017). 'Management and supervisory support as a moderator of work–family demands and women's well-being: A case study of Muslim female academicians in Malaysia', *Humanomics*, 33(3), pp. 335-356.

Adams, J. S. (1965). Inequity in social exchange. In Advances in experimental social psychology (Vol. 2, pp. 267-299). Academic Press.

Adetayo, A.,Dr. Senathirajah, A. R. B. S, Devasia,S.N. & Haque,R. (2022). Modelling Consumer Perception of Service Quality in Banks, *Res Militaris, European Journal of Military Studies, (12)(2),*1357-1373. https://resmilitaris.net/menu-script/index.php/resmilitaris/article/view/207/137

Adusei, H., Sarfo, J.O. and Manukure, P. et. al. (2016). 'If I should stop teaching now, where will I go? Turnover intentions among high school teachers in Ghana', *European Journal of Contemporary Education*, 17(3).

Ahmed,S., Chowdhury,B., Khalil,M.I., Haque,R., & Senathirajah, A. R. bin S. (2022a). A Structural Path Modeling Study on Factors Affecting Sales Performance Amongst SMEs, International Journal of e-Business and e-Government Studies, (14)(3) 560-577. https://sobiad.org/menuscript/index.php/ijebeg/article/view/1319/269

Ahmed,S., Haque,R., Senathirajah, A. R. bin S., Chowdhury, B., & Khalil,M.I. (2022b). Examining the Mediation Effect of Organisational Response Towards Covid-19 on Employee Satisfaction in SMEs, International Journal of Operations and Quantitative Management. *(28)(2)*,461-485. https://submissions.ijoqm.org/index.php/ijoqm/article/view/93/26

Almaaitah, M.F., Harada, Y., Sakdan, M.F. and Almaaitah, A.M. (2017). 'Integrating Herzberg and social exchange theories to underpinned human resource practices, leadership style and employee retention in health sector', *World Journal of Business and Management*, 3(1), pp. 16-34.

Balakrishnan, L. and Vijayalakshmi, M. (2014). 'Cross cultural training a study to understand the importance in global businesses', *Proceedings of the International Conference - Frontiers of Management*.

Blau, P. M. (1968). Social exchange. *International encyclopedia of the social sciences*, *7*(4), 452-457.

Chiekezie, O.M., Emejulu, G. and Nwanneka, A. (2017). 'Compensation management and employee retention of selected commercial banks in Anambra State, Nigeria', *Archives of Business Research*, 5(3), pp. 115-27.

Chin, A. (2018). Talent retention in international schools of Malaysia. *A Master's Thesis. Malaysia: Inti International University*.

Chin, C.L. (2018). 'The influence of job satisfaction on employee turnover intention in the manufacturing industry of Malaysia', *Journal of Arts & Social Sciences*, 1(2), pp. 53-63.

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. Modern methods for business *research, 295(2), 295-336*.

Chowdhury,B, Haque,R., Senathirajah, A. R. bin S., Khalil,M.I., & Ahmed, S.(2022). A Structural Path Study Modelling Factors Influencing Social Entrepreneurship Intention: A Bangladeshi Youth Case Study, International Journal of Operations and Quantitative Management, *(28)(2)*,418-440. https://submissions.ijoqm.org/index.php/ijoqm/article/view/91/29script/index.php/resmilitaris/article/view/235/159

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *psychometrika*, *16*(3), 297-334.

Darkwa, K., Newman, M., Kawkab, M. and Chowhudhury, M. (2015). 'A qualitative study of factors influencing retention of doctors and nurses at rural healthcare facilities in Bangladesh', *BMC Health Services Research*, 15, p. 344.

Dermawan, A (2021). Homegrown M&E players announce RM520 million expansion in Penang. *New Straits Times*. https://www.nst.com.my/business/2021/11/742770/homegrown-me-players-announce-rm520-million-expansion-penang

Desai, D. (2018). 'A study on linkage between job satisfaction and employee retention', *International Journal for Research in Applied Science & Engineering Technology*, 6 (6).

Du Plessis, A., & Sukumaran, S. (2015). The role of HRM in leadership development, talent retention, knowledge management, and employee engagement.

Faisal, A.S., R. Haque, A.K. Pang, A. Rahman, and G. Connie. 2020. The influence of e-service quality dimensions on customer satisfaction and purchase intention: An Indian e-market perspective. *Asian Journal of Technology & Management Research* 10 (01): 1–22.

Field, M., & Golubitsky, M. (2009). *Symmetry in chaos: a search for pattern in mathematics, art, and nature*. Society for Industrial and Applied Mathematics.

Garson, G. D. (2012). Testing statistical assumptions.

George, D., and Mallery, M. (2010). SPSS for Windows Step by Step: A Simple Guide and Reference, 17.0 update (10a ed.) Boston: Pearson.

Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American sociological review*, 161-178.

Hailong, Y., Tao, M.W., Michael,M.A., Senathirajah, A. R. B. S., & Connie, G.(2022b), Online Apparel Retailing: E-Service Attributes Influencing Purchase Intention, *Res Militaris,12(2)* Summer-Autumn, 1141-1153, https://resmilitaris.net/menu-script/index.php/resmilitaris/article/view/185/114

Hailong,Y., Senathirajah, A. R. B. S, Connie,G., & Haque,R. (2022a). Key E-Dimensions influencing hotel website quality, *Res Militaris, European Journal of Military Studies , (12)(2) Summer-Autumn*,1567-1583. https://resmilitaris.net/menu

Hair Jr, J., Page, M., and Brunsveld, N. (2019). Essentials of business research methods. *Routledge*.

Haque, R., Rahman, A., & Kow, A. P. A. (2020). Factors Affecting Customer's Satisfaction and Loyalty in Hospitals in China. Asian Journal of Technology & Management Research, 10(1), 101-115.

Hasan, N.A.B.B. and Teng, L.S. (2017). 'Work-life balance and job satisfaction among working adults in Malaysia: The role of gender and race as moderators', *Journal of Economics, Business and Management*, 5(1), pp. 18-24.

Hassan, F.D. and Ehsan, A. (2015). Barriers to women career advancement (glass ceiling) and the role of personality traits (self-esteem, self-efficacy) as means of breaking through', *Human Resource Management*, 2(8), pp. 9-16.

Henseler, J., Ringle, C. M., and Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In *New challenges to international marketing* (Vol. 20, pp. 277-319). Emerald Group Publishing Limited.

Ibidunni, S., Osibanjo, O. and Adeniji, A. et. al. (2016). 'Talent retention and organisational performance: A competitive positioning in Nigerian banking sector', *Periodica Polytechnica Social and Management Sciences*, 24(1), pp. 1-13.

Ismail, F., Ka, H. K., Fern, N. W., and Imran, M. (2021). Talent management practices, employee engagement, employee retention; empirical evidence from Malaysian SMEs. *Studies of Applied Economics*, *39*(10).

Jefri, N.A.M. and Daud, N. (2016). 'Exploring employee retention among Gen Y in oil and gas industry in Malaysia', *International Academic Research Journal of Business and Technology*, 2(2), pp. 152-6.

Jiang Y, Abdullah SINW, Lim BJH, Wang R and Phuah KT (2023) The role of marketing stimuli and attitude in determining post-COVID buying decisions toward organic food products: evidence from retail consumers in Beijing, China. Front. Sustain. Food Syst. 7:1051696. doi: 10.3389/fsufs.2023.1051696

Kaiser, H. F. (1974). An index of factorial simplicity. *psychometrika*, *39*(1), 31-36.

Kaplan, R. S., and Norton, D. P. (1992). The balanced scorecard--measures that drive performance. *Harvard Business Review*, *70(1), 71-79*.

Kaplan, R.M., & Saccuzzo, D.P. (1982). Psychological Testing: Principles, Applications, and Issues.

Kaur, R. (2017). 'Employee retention models and factors affecting employees' retention in IT Companies', *International Journal of Business Administration and Management*, 7(1), pp. 161-74.

Keenawinna, K.A.S.T. and Sanjeevanie, T.L. (2017). 'Impact of glass ceiling on career development of woman: A study of women branch managers in state owned commercial banks in Sri Lanka', *Proceedings of International HR Conference*, 2(1).

Khalil, I., Haque, R., Senathirajah, A. R. B. S., Chowdhury, B., Ahmed, S. (2022a). Factors Affecting the Growth of Smes in Bangladesh: A Structured Equation Modeling Approach. *International Journal of eBusiness and eGovernment Studies, 14 (3),* 578-593. doi:10.34111/ijebeg.202214128

Khalil,M.I., Haque,R., Senathirajah, A. R. bin S., Chowdhury,B., & Ahmed,S., (2022b). Modelling Factors Affecting SME Performance in Malaysia, *International Journal of Operations and Quantitative Management, (28)(2)*,506-524. https://submissions.ijoqm.org/index.php/ijoqm/article/view/95/28.

Koh E. H. and Manuel N. (2020). Automation and adaptability: How Malaysia can navigate the future of work. *McKinsey Global Institute.* https://www.mckinsey.com/featured-insights/asia-pacific/automation-and-adaptability-how-malaysia-can-navigate-the-future-of-work

Krejcie, R. V., and Morgan, D. W. (1970). Determining sample size for research activities. *Educational and psychological measurement*, *30*(3), 607-610.

Latif, F.D.A. and Saraih, U.N. (2016). 'Factors influencing employee turnover in private sector in Malaysia: A concept paper', *Australian Journal of Basic and Applied Sciences*, 10(7), pp. 51-5.

Lee, S., and Lee, D. K. (2018). What is the proper way to apply the multiple comparison test? *Korean journal of anesthesiology*, *71*(5), 353-360.

Li,X.T., Rahman,A.,Connie,G., & Osman,Z. (2020) Examining customers' perception of electronic shopping mall's e-service quality, *International Journal of Services, Economics and Management, 11(4),*329-346. https://doi.org/10.1504/IJSEM.2020.111930

Macak, T., Stusek, J. and Venclova, K. (2015) 'Factors Influencing Career Success of Employees in Agribusiness'. *Agris On-Line Papers in Economics & Informatics.* 7(4) pp. 79-89.

Mahadi, N., Woo, N. M., Baskaran, S., and Yaakop, A. Y. (2020). Determinant factors for employee retention: Should I stay. *International Journal of Academic Research in Business and Social Sciences*, *10*(4), 201-213.

Malhotra, N. K., and Peterson, M. (2006). Basic marketing research: A decision-making approach.

Mandhanya, Y. (2015). 'A study of impact of working environment on retention of Employees (With special reference to Automobile sector)', *Global Management Review*, 9(4), pp. 116-28.

Mertler, C.A. (2016). 'Should I stay or should I go? Understanding teacher motivation, job satisfaction, and perceptions of retention among Arizona teachers', *International Research in Higher Education*, 1(2).

Mita, M., Aarti K. and Ravneeta, D. (2014). 'Study on employee retention and commitment', *International Journal of Advance Research in Computer Science and Management Studies*, 2, pp. 154-64.

Montosa, V., Bolin, S. and Mitchell, M. et. al. (2014). 'Assessing compensation changes', *Retirement Research and Planning Division*, 8.

Nagarajan, T. (2016). Talent retention strategies, organisational commitment and intention to stay in commercial banks in Malaysia: The moderating role of person-organisation fit. *PhD thesis. Pulau Pinang, Malaysia: Universiti Sains Malaysia.*

Nellikunnel, S., Haldorai, K., Rahman, A., & Zangose, M. (2017). The country of origin effect on consumer purchase intention: PLS modelling. International Journal of Business and Globalisation, 19(3), 378– 395. https://doi.org/10.1504/IJBG.2017.087219

Nellikunnel, Syriac, Abdul Rahman, Arif Jawaid, and Lim Eng Sim. (2015). "Generation Y male cosmetic consumption patterns: regression modelling." International Journal of Modelling in Operations Management 5, no. 2: 154-176

Nunnally, J. C. (1978). An overview of psychological measurement. *Clinical diagnosis of mental disorders: A handbook*, 97-146.

Nunnally, J.C., and Bernstein, I.H. (1994). *Psychometric theory (3rd ed.).* McGraw-Hill.

Ogiemwonyi, O., Harun, A., Rahman, A., Hamawandy, N. M., Alam, M. N., & Jalal, F. B. (2018). Examining the impact of service quality dimensions on customer loyalty towards hypermarket retailing: A case study of Malaysia. International Journal of PsychosocialRehabilitation, 24(04).

Olckers, C. and Plessis, Y.D. (2015). 'Psychological ownership as a requisite for talent retention: the voice of highly skilled employees', *European Journal of International Management*, 9(1).

Osman, I., Noordin, F., Daud, N. and Othman, M.Z. (2015). 'The dynamic role of social exchange and personality in predicting turnover intentions among professional workers', *7th International Economics and Business Management Conference*, 35, pp. 541-552.

Othman, F., Bahrin, M. A., and Azli, N. (2016). Industry 4.0: A review on industrial automation

and robotic. *J Teknol*, *78*(6-13), 137-143.

Othman, R., Alias, N.E. and Ariadi, N.S. et. al. (2017). 'Employee retention in emerging economy: A case of Gen Y in Malaysian manufacturing company', *Journal of Computational and Theoretical Nanoscience*, 23(8), pp. 7637-7640.

Ott, D. L., Tolentino, J. L., and Michailova, S. (2018). Effective talent retention approaches. *Human resource management international digest*, *26*(7), 16-19.

Oxford University Press. (2023). Automation. In *Oxford Learner's Dictionaries*. Retrieved from [https://www.oxfordlearnersdictionaries.com/definition/english/automation?q=automation]

Pandita, D. and Ray, S. (2018). 'Talent management and employee engagement – a meta-analysis of their impact on talent retention', *Industrial and Commercial Training*, 50(4), p. 15.

Rahman, A., Hong, C., Haque, R., Alfred, P. and Connie, G. (2011). Customer Satisfaction in Tourism Service Quality. Advanced Science, American Scientific Publication. 4, pp. 3398-3402

Rahman, A., San, L. H., Jing, D., Yan, Q., and Nellikunnel, S. (2017). Modelling consumers' perceptions of internet service quality by structured equation analysis. International Journal of Services, Economics and Management, 8(3),197. doi:10.1504/ijsem.2017.095447

Rahman, A., Siang, T., Zahir, O., San, L., Jawaid, A., Subramaniam, P., and Haque, R. (2018). Modelling Consumer Perceptions of Internet Retail Service Quality through Structured Equation Analysis. Herald NAMSCA 1

Rajaram, S. and Keerthika, B.D. (2015). 'Impact of work life balance on job satisfaction: A study on Indian women journalists', *Global Journal of Business and Social Science Review*, 3(1), pp. 102-110.

Rajathi, V.M.A. and Pavithra, P. (2018). 'Impact of job satisfaction on employee retention of IT professionals', *International Journal of Trend in Scientific Research and Development*, 2(3).

Saadin, I., Ramli, K. and Johari, H. et. al. (2016). 'Women and barriers for upward career advancement – A survey at Perak State Secretariat, Ipoh, Perak', *Procedia Economics and Finance*, 35, pp.574-581.

Saari, M.Y., Rahman, M.A.A. and Hassan, A. et. al. (2016). 'Estimating the impact of minimum wages on poverty across ethnic groups in Malaysia', *Economic Modelling*, 54, pp. 490-502.

Satpal, M.D. (2016). 'Retaining employees in Indian IT Sector', *International Journal of Science Technology and Management*, 5(3), pp. 163-168.

Saunders, M., Lewis, P. and Thornhill, A. (2017). Research methods for business students. 6th ed. Harlow, UK: *Pearson Education Limited.*

Schober, P., Boer, C., and Schwarte, L. A. (2018). Correlation coefficients: appropriate use and interpretation. *Anesthesia & analgesia*, *126*(5), 1763-1768.

Sekaran, U. and Bougie, R. (2016). Research methods for business: a skill-building approach. 7th edn. Haddington: *John Wiley & Sons.*

Senasi, V. and Khalil, S. (2015). 'Implementation of minimum wage policy in Malaysia: Manufacturing employers' perceptions of training provision and fringe benefits', *International Journal of Humanities and Social Science*, 5(12), pp. 87-94.

Senathirajah, A. R. B. S & Haque, R. (2022). A Phenomenological Study Exploring Consumers' Perception Of E-Service Quality: A Case Study On Online Shoppers, *Res Militaris, (12)(2)*,1250-1262,https://resmilitaris.net/menu-script/index.php/resmilitaris/article/view/199/129

Shah, N.H. and Jumani, N.B. (2015). 'Relationship of job satisfaction and turnover intention of private secondary school teachers', *Mediterranean Journal of Social Sciences*, 6(4), pp. 313-323.

Syafiq, M (2022). Warehouse Automation in Malaysia. *JLL Property Services.*

https://amcham.com.my/wp-content/uploads/Warehouse-Automation-Challenges-faced-by-industry-players.pdf

Tan, A. R. (2023). South East Asia Reality Check The 'Not-So-Great' Resignation. Robert Walters. https://www.robertwalters.com.sg/content/dam/robert-walters/country/singapore/files/whitepapers/rwsea-the-not-so-great-resignation-e-guide.pdf

Umamaheswari, S. and Krishnan, J. (2015). 'Retention factors and their relative significance in ceramic manufacturing industries in India', *Asian Social Science*, 11(13), pp. 260-268.

Wider,W. (2023). Effects Of Metacognitive Skills On Physics Problem -Solving Skills Among Form Four Secondary School Students. *Journal of Baltic Science Education, 22*(2),pp.357-369.

Yadav, R.K. and Dabhade, N. (2014). 'Work life balance and job satisfaction among the working women of banking and education sector - A comparative study', *International Letters of Social and Humanistic Sciences*, 21, pp. 181-201.

Yamazakia, Y. and Petchdee, S. (2015). 'Turnover intention, organisational commitment, and specific job satisfaction among production employees in Thailand', *Journal of Business and Management*, 4(4), pp. 22-38.

Yi, L. M., Wan, T. S., Haldorai, K., Rahman, A., Haque, R., Haibin, P., & Shengnan, Y. (2018). Structure Equation Analysis on Customer Satisfaction of Public Transport: An Empirical Study in Klang Valley Malaysia.International Journal of Engineering & Technology,7(4.38), 778-782.

Zikmund, W. G., Babin, B. J., Carr, J. C., and Griffin, M. (2003). Research methods. *Health economics research method*, *2*.