

ASSESSING CONSTRUCT VALIDITY OF GEN Y ACCEPTANCE ON '3D' INDUSTRIES AND ITS DETERMINANT FACTORS

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1. INTRODUCTION

Malaysia is dependent on millions of foreign workers to fill up the job vacancies in the 'dirty, dangerous and difficult' ('3D') industries for the manufacturing, construction, services, plantation, and agriculture sectors (Ministry of Human Resources (MOHR), 2019). Due to the COVID-19 pandemic, the border control has restricted the movement of pass holders from India, Indonesia, and the Philippines, as well as a freeze on the recruitment of foreign workers (Immigration Department of Malaysia, 2020; Ministry of Human Resources, 2020). Globally, as of September 2021, the confirmed COVID-19 cases were about 218,946,836 with 1,786,004 cases reported in Malaysia (World Health Organisation (WHO), 2021). Therefore, worldwide issues on the pandemic have indirectly changed the recruiting trend in Malaysia, strategising and prioritising the Malaysian locals, especially the Generation Y (Gen Y) youth over these unskilled foreign workers. Shrivastava, Ikonen, and Savolainen (2017), Nichols and Smith (2015), and Dries, Pepermans, and Carlier (2008) concurred that Gen Y referred to those who were born between 1980 to 2000. These unforeseen circumstances had in a way forced the employers and government to focus on the issues of unemployment amongst Malaysians. The latest unemployment rate as of June 2021 was 4.8%, and it kept increasing due to the COVID-19 pandemic (Department of Statistics Malaysia, 2021).

This study was concerned with two issues, specifically, the influx of unskilled foreign workers in '3D' industries had led to a reduction in job opportunities in the '3D' industries for Malaysians, especially amongst youth, low productivity for the industries due to the low rate of physical capital, poor quality control, time-consuming and problematic workers that caused the outflow of money to their home countries. Secondly, it was argued that most of the Malaysian youth have limited knowledge or awareness and understanding about '3D' industries. As a result, the Gen Y youth were reluctant to work in '3D' industries due to misconceptions and lack of awareness about the industries (Achim, Rusdi & Amin, 2017; Annuar, 2019). Undeniably, the jobs in '3D' industries are less attractive and make them shy away from dirty, dangerous, and difficult jobs.

The research aimed to gauge the level of understanding of '3D' industries and to identify the level of involvement and the main causes for the Malaysian Gen Y youth to stay away from '3D' industries. Therefore, this study briefly presented the findings on the construct validity (exploratory factor analysis) of Gen Y youth acceptance towards '3D' industries and its determinant factors. There were four determinant factors involved as independent variables (IV), which include wages and benefits, recognition, career development, and job security, and

one dependent variable was Gen Y youth involvement in ‘3D’ industries. Based on the Meta-analysis of this study, these determinant factors had driven the involvement of Gen Y youth in ‘3D’ industries. As argued by Iseback and Rostrom (2015), the quality of work amongst Gen Y youth was most affected by their external factors and social development. The Gen Y youth acceptance on ‘3D’ jobs are based on the basic requirement and conditions. Several past studies concluded that factors highlighted in Herzberg's Two Factor Theory, such as wages and benefits, recognition, career development, and job security were important determinants amongst the workers (Naim & Lenka, 2018; Kamaruddin, Abdullah, & Ayob, 2018; Alrawahi, Sellgren, Altouby, Alwahaibi, & Brommels, 2020). Herzberg’s Two-Factor Theory was considered to reflect the relevant motivation factors in attracting them into ‘3D’ workplaces (Yusoff, Kian, & Idris, 2013).

2. METHODOLOGY

A cross-sectional approach and stratified sampling technique were employed for the research. The structure of the survey comprised four sections that were (Section A) Respondent’s Demographic Profile, (Section B) General Information about ‘3D’ Industries, (Section C) Understanding about ‘3D’ Industries, (Section D) Factors of the Malaysian Gen Y Youth Involvement in ‘3D’ Industries (wages and benefits, recognition, career development, job security) and (Section E) Gen Y Youth Involvement in ‘3D’ Industries. This study utilised nominal, ordinal, and interval scales that are the Likert 7-scales to obtain valuable information from the respondents. The items in the instrument were developed based on a review of the Literature Review as well as self-developed items after thorough discussions with the experts from academicians in study. The items were further validated via pilot study to 50 respondents before actual data collection. Apart from face-to-face data collection, the main survey was also conducted via online distribution (Google Forms). The online distribution was adopted to adjust the data collection method due to the Malaysian Movement Control Order (MCO) during the COVID-19 pandemic. This survey was conducted from June to July 2020. Data was collected from 420 Malaysian Gen Y youth, aged between 20-year-old to 40-year-old in the Klang Valley (Selangor, Kuala Lumpur, and Putrajaya). The respondents comprised the public and students from the *Institute Kemahiran Latihan Awam*.

3. FINDINGS AND DISCUSSION

In the research area, an exploratory factor analysis (EFA) is important to be performed as a statistical method to construct validity. The summary results of EFA are shown in Table 1.

Table 1: Summary Results of Exploratory-Factor-Analysis (EFA)

Items	Factors				
	1	2	3	4	5
Factor 1: Job Security (IV)					
I believe ‘3D’ industries should have a safe working environment.	0.707				
I believe ‘3D’ industries should provide guaranteed employment.	0.747				
‘3D’ industries should promote quality work life.	0.711				
‘3D’ industries should provide long-term employment.	0.681				
‘3D’ industries should provide regular training on safety.	0.772				
‘3D’ industries should provide protective safety equipment for workers.	0.811				
‘3D’ industries should have clear safety rules and regulations.	0.772				

'3D' industries should promote the use of technology to reduce life and work-threatening environment.	0.681
'3D' industries should promote the use of advanced technology in performing critical work on site.	0.661
Factor 2: Career Development (IV)	
I believe that '3D' industries could provide equal opportunities for career development amongst all workers, regardless of nationality.	0.578
I wish '3D' industries would provide me opportunities to learn new skills for my career development.	0.571
I believe working in '3D' industries allows me to grow and develop as a person.	0.643
I believe '3D' industries could provide good opportunities for employees to take a bigger responsibility in their careers.	0.642
'3D' employers should consider the level of seniority and years of experience for career development.	0.657
I wish '3D' industries would have a clear career path.	0.703
'3D' industries should chart comprehensive company policies and rules for career development.	0.722
'3D' industries should provide realistic job previews for attractive career development.	0.646
I believe '3D' industries could provide promising career development for the incumbents.	0.685
Factor 3: Recognition (IV)	
I wish to receive positive feedback for a job well done.	0.541
I am motivated to work harder and stay longer if my employer appreciates my work.	0.565
I am willing to change my job frequently just to seek job acknowledgment.	0.526
I appreciate it if my employer recognises me as an asset to the organisation.	0.749
I would prefer regular feedback and recognition from my manager.	0.769
I appreciate it if my employer recognises my creative suggestion.	0.773
I appreciate it if my employer always shows respect and value to my efforts.	0.736
Factor 4: Gen Y Youth Involvement in '3D' Industries (DV)	
I am willing to work in '3D' industries.	0.740
My parents could influence me to work in '3D' industries.	0.799
People around me could influence my involvement in '3D' industries.	0.856
Successful role models could influence my involvement in '3D' industries.	0.784
Success stories could influence my involvement in '3D' industries.	0.766
Viral news in social media could influence my involvement in '3D' industries.	0.636
Factor 5: Wages and Benefits (IV)	
I expect fair and attractive wages and benefits to be offered in '3D' industries.	0.652
I expect to receive appropriate wages and benefits if I work in '3D' industries.	0.614
I expect rewards for overtime and any other extra work in '3D' industries.	0.589
I believe that wages and benefits are the main factors that influence my decision to work in '3D' industries.	0.700
I believe that working in '3D' industries abroad is more attractive due to the better salary package offered.	0.673
I believe bonuses and other financial incentives would influence my involvement in '3D' industries.	0.691

I think wages and benefits reinforce me to work harder in '3D' industries.					0.591
Eigenvalues	16.577	2.994	2.104	1.750	1.364
Percentage of Variance (%)	43.62	7.88	5.54	4.61	3.59
Total Variance Explained	43.62	51.50	57.04	61.65	65.23
KMO Measure of Sampling Adequacy			0.955		
Approximate Chi-square			11938.353		
Sig			0.000		

Extraction Method: Principal Component Analysis
Rotation Method: Varimax with Kaiser Normalisation

The EFA analysis produced highly satisfactory results of the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO), which was 0.955 (>0.06), Bartlett's Test of Sphericity was less than 0.05 ($p < 0.05$), and the range of eigenvalue of more than 1 (>1), was between 1.364 to 16.577. Factor One (1) had been identified as job security (IV), whereby nine items were loaded under this factor. All the items in this factor were retained since the scores were 0.661 to 0.881. They were considered good as they were greater than 0.4 (>0.4) and all the items were dominantly loaded in the same factor (Factor 1) (Samuels, 2017). Factor Two (2) was identified as career development (IV). Nine items were loaded under this factor and only one item was eliminated due to the unrotated factor analysis result, indicating the lowest factor loading scores of 0.470. The eliminated item was *"I believe '3D' industries are not low, demeaning and portray negative social stigma"*. Factor Three (3) was recognition (IV). Three items were dropped due to weak, zero factor loading scores and cross-loading issues. The dropped items were *"I am attracted to work in '3D' Industries that have a very good, clear and well-defined recognition practice"*, *"I genuinely feel appreciated when '3D' industries acknowledged my work achievement"* and the last dropped item was *"I think '3D' industries should promote a culture of fair recognition and do not differentiate amongst nationalities"*. As a result, the deleted items had diminished errors and generated better results, especially on the number of factors that appeared in the rotated component matrix. Factor Four (4) was the Gen Y Youth Involvement in '3D' Industries (DV). Due to some errors in the rotated component matrix, this study had deleted one by one of the items, namely, *"Rebranding of '3D' industries could influence my decision to work in these industries"* followed by *"High dependency on foreign workers could influence my involvement in '3D' industries"*, *"Securing jobs in '3D' industries is easy"* and *"Information about job opening is easily available"*. Factor Five (5) was wages and benefits (IV). Only one item was eliminated in this factor which was, *"I will consider working in '3D' industries if the minimum wages is above RM1,200"*. The range of the retained items for these factors was from 0.589 to 0.700, which was acceptable. Generally, EFA analysis in this study had successfully explained a precise and valid correlation matrix.

4. CONCLUSION

The findings outlined the steps and procedures in presenting the study's construct validity. The principal component factor analysis with varimax rotation was applied to establish a simple structure of the factors in attracting the involvement of Gen Y youth in '3D' industries. The situation of the COVID-19 pandemic leads to serious employment of the Malaysian Gen Y youth for '3D' industries. However, the respective bodies, such as the government (policymaker) and employers should identify the right determinants in hiring and retaining Gen Y youth for '3D' industries in the long term. In line with the current needs of the Malaysian Gen Y youth, this study had found the determinant factors for the involvement of Gen Y in the '3D' industries, such as services, manufacturing as well as construction. The findings were crucial as the '3D' industries had recorded the highest contributors to the country's economy and the most significant industries to the Malaysian GDP. In conclusion, there are also some

elements to be considered in '3D' industries, for instance, the workforce structure, management, and policy (Organisation for Economic Co-Operation and Development (OECD), 2018).

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