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Profiling Return – to – Work (RTW) Recipients in Malaysia

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Abstract

This study aimed to profile and determined the characteristics of participants in the return-to-work (RTW) programme. The participants' characteristics are based on six variables, namely age, gender, race, education, sector, and salary. Information regarding participants' characteristics will be helpful, especially for Social Security Organisation (SOCSO), to understand who or what type of individuals are usually involved with the RTW programme. Besides, this research will help SOCSO identify the most significant factors influencing the RTW programme participants to return to their work based on the six variables mentioned above. The characteristics and significant factors will expose bigger room for improving the RTW programme. The improvement is crucial and must be undertaken from time to time to ensure that the programme can be suited to the current employment scenario. Moreover, the efficiency of the RTW programme must be ensured to assist participants to return for their work.

Keywords: SOCSO, Return to Work, Employment Injury Scheme, Invalidity Pension Scheme, Rehabilitation.

Introduction

The return-to-work (RTW) programme was introduced in 2007 by Social Security Organisation (SOCSO) to enhance Physical and Vocational Rehabilitation Facilities. The aims of the RTW programme are mainly to help disabled or insecure employees by securing them to return to their work, providing support, and advising them to create a positive working atmosphere, minimising their disability duration, and increasing their productivity through total replacement of income (Mohammed, 2014; SOCSO, 2019, 2020). For instance, the insured may be assigned a different job requiring them to work at a slower rate during the

recovery process. In addition, the RTW programme has been introduced to fulfil SOCSO's social duty in the employment world and lower the possibility of similar accidents happening in the future (Awang et al., 2015; Mohammed, 2014; SOCSO, 2014; Thomten et al., 2016).

Injured employees will be allowed to join the RTW programme under the Invalidity Scheme and Employment Injury Scheme. They could receive a better rehabilitation service to ensure a fast recovery. Nevertheless, the increasing number of benefit recipients under both schemes shows that Malaysia has many unproductive employees. The numbers also indicate that SOCSO's expenditure on benefit payments has never decreased for five years in a row. This problem might worsen in the future if no action is taken (Hashim & Ogden, n.d.).

Literature Review

The RTW programme is crucial to help employers retain their experienced and skilful workers and subsequently cut the cost of training and hiring new workers. The programme also offers the insured a range of work options if they cannot carry out their pre-injury job. On the other hand, the RTW programme benefits the insured with consultation, psychological support, and appropriate equipment to enhance their confidence level. Resultantly, they may recover quickly, and the effect on life quality due to disabilities can be reduced (Yean & Sukery, 2012).

Malaysia is not the only country to implement the RTW programme. In fact, SOCSO was assisted by the Commonwealth Rehabilitation Services (CRS) of Australia during the commencement of this programme in 2007(Murad et al., 2009). Besides, SOCSO has also adopted the process introduced by CRS with several modifications made to suit the SOCSO's objectives. In addition, according to Merrion Street, the Irish Government News Service, Ireland launched a new programme, named 'Pathways to Work 2016 -2020,' in January 2016. Nonetheless, the approach is slightly different from other countries. The programme aimed to achieve full employment and increase the labour force to 2.2 million by 2020 (SOCSO, 2021).

In Singapore, the RTW programme is still in its infancy stage compared to Malaysia. Unfortunately, both Malaysia and Singapore are facing similar issues in occupational rehabilitation in terms of lack of funds, expertise, and the effectiveness of the programme's implementation (Awang et al., 2015).

Methodology

The data collected for this study is secondary data from SOCSO concerning the RTW programme in Malaysia. The research covers 1,552 individuals. The data on the characteristics of participants joining the RTW programme comprises six variables such as age, gender, salary, race, salary, and sector, besides their status in the RTW programme. Participants included in the data are those who have received an offer to join the RTW programme. They have either returned to their work or still undergoing the rehabilitation process (Chek et al., 2018b).

Descriptive statistics were used to observe the importance of the independent variables to the data. The statistics showed the overall view of the data and the characteristics of each variable (Chek et al., 2012). This study utilised SAS Enterprise Miner (SAS E-miner)

software to analyse the data (Sekaran & Bougie, 2013; Zikmund et al., 2013). Before the data was inserted in SAS E-miner, the variables in raw data format were coded for easier interpretation in SAS E-Miner (Refer to Table 1).

Table 1
Decodes of Variables

Variables	**Type of variables**
Age	1 : 20 – 29 2 : 30 – 39 3 : 40 – 49 4 : 50 – 59
Gender	1 : Male 2 : Female
Race	1 : Malay 2 : Chinese 3 : India 4 : Others
Industry	1 : Construction 2 : Trading 3 : Manufacturing 4 : Services 5 : Electrical, electronics, gas, water, or sanitary service 6 : Agriculture, forestry, fishery 7 : Public services 8 : Transportation 9 : Financial institution or insurance 10 : Mining and quarrying 11 : Others or not employed
Education	1 : Primary School 2 : Secondary School 3 : Tertiary School
Status (Target)	0 : In rehabilitation 1 : Return to work

Next, the types of variables of the data need to declare in SAS E-Miner. The variables are shown in Table 2.

Table 2
Description of Variables

Variables	**Type of variables**
Age	Nominal
Gender	Binary
Race	Nominal
Salary	Interval
Industry	Nominal
Education	Nominal
Status (Target)	Binary

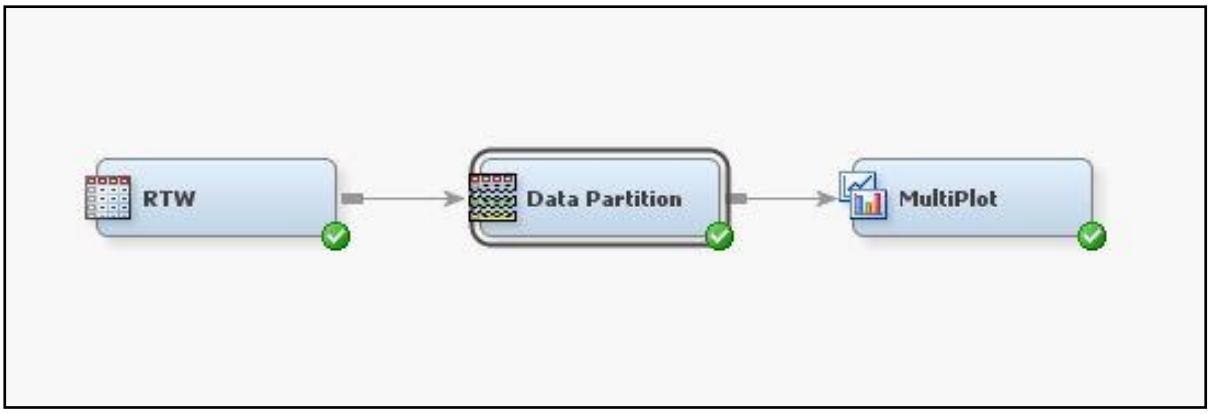

Figure 1: Descriptive Analysis Nodes

The model diagram shown in Figure 1 illustrates the flow of the nodes for descriptive analysis. The data were explored to observe the patterns for each independent variable. The results were generated in histogram forms. After the data was imported to SAS E-Miner, missing values and outliers were identified (Sekaran & Bougie, 2013; Stevenson & Ozgur, 2007). Replacement nodes and impute nodes were used to handle any missing values in the data. Nevertheless, the data in this study did not have any missing values and outliers. Thus, the replacement and impute nodes were unused in the data set. Multi plot node was used to show the result in the form of histograms regarding the variables' status (Frees et al., 2009).

Analysis and Result

As stated earlier, the study on the data of the RTW programme from SOCSO covers 1,552 individuals. Figure 2 shows the number of participants in the RTW programme based on the age range groups. The data is grouped into four categories based on the range of age.

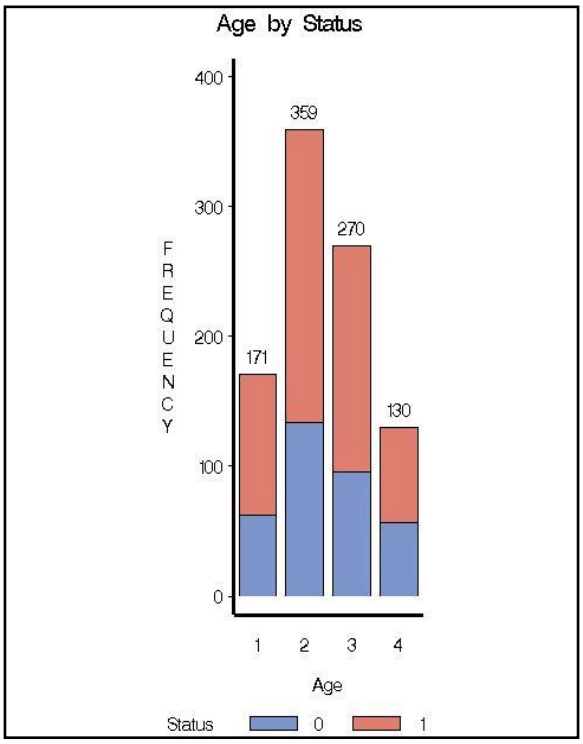

Figure 2: Frequency of Participants According to Age

Group 1 comprised participants from 20 to 29 years old, while Group 2 consisted of those from 30 to 39 years old. Group 3 includes 40 to 49 years old participants, whereas those aged 50 to 59 are in Group 4. Group 2 (30 to 39 years old) has the highest number of participants, followed by Group 3 (40 to 49 years old). Participants aged 50 to 59 years old from Group 4 reported the lowest number of participants in the RTW programme.

The data in Figure 3 are grouped into three levels that represent the participants' educational backgrounds. Level 1 comprises participants who have primary school level education, whereas those in Level 2 have secondary school level education. Participants with tertiary level education are in Level 3. The relationship between the number of participants and the level of education is shown below. Most of the participants in the RTW programme had a secondary level educational background, while participants with primary level education were the least.

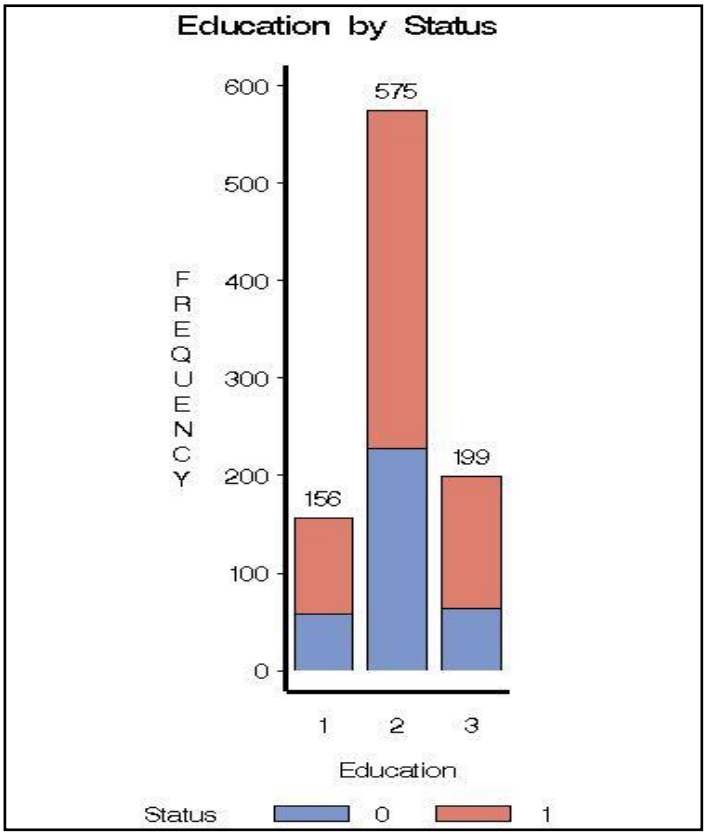

Figure 3: Frequency of Participants According to Level of Education

Figure 4 shows the frequency of participants as per their gender classification. Male participants were assigned as 1, while female participants were assigned as 2. The graph shows that males are the dominant participants of the RTW programme.

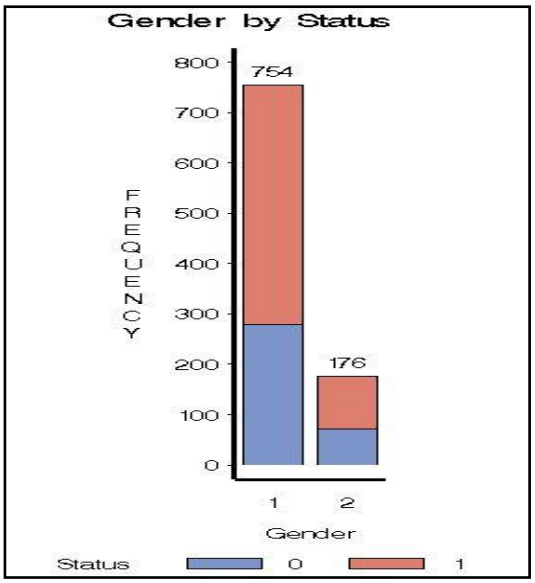

Figure 4: Frequency of Participants According to Gender

Figure 5 shows the frequency of participants based on race. The race was divided into four groups. Group 1 represents Malays, Group 2 comprise Chinese participants, Group 3 consists of Indians, while Group 4 includes other races. Most participants in the RTW programme are Malays, followed by Indians. Other races have the lowest number of participants in the RTW programme.

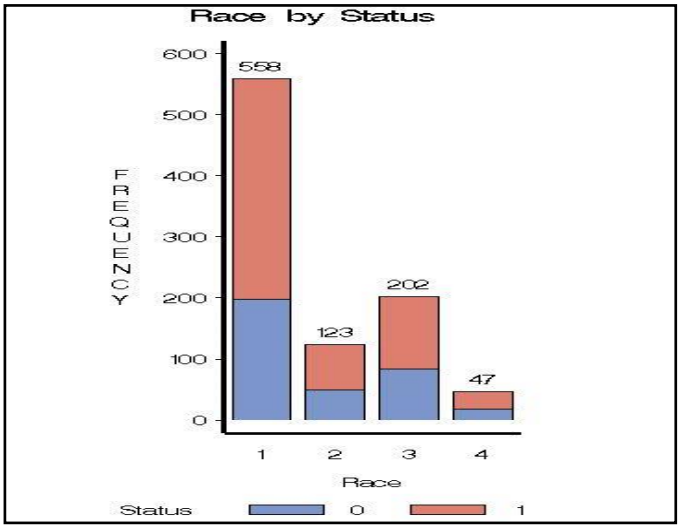

Figure 5: Frequency of Participants According to Races

Figure 6 shows the relationship between the number of participants and the industry they work. The data for the industry is categorised into 11 sectors, as shown in Table 2 previously. Sector 3, the manufacturing sector, has the highest number of participants. The services sector (Sector 4) has the second-highest number of participants in the RTW programme. The financial or insurance sector had the second least number of participants in the RTW programme, with 13 participants. Mining and quarrying reported the lowest number of participants in the RTW programme, with only 11 participants.

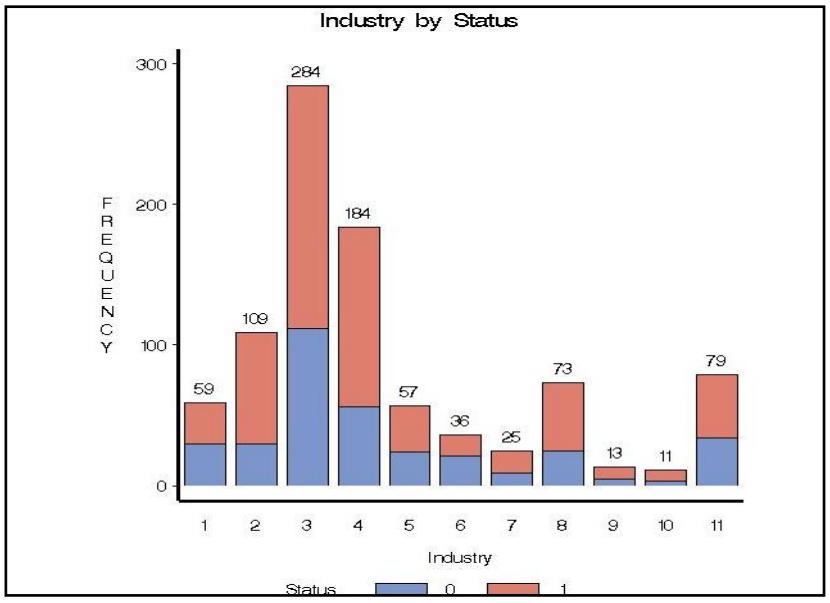

Figure 6: Frequency of Participants According to Industry

Figure 7 shows the number of participants in the RTW programme based on their salary. The lowest salary gained by the participant was RM77. In contrast, the highest salary gain by the participant was RM8,780. Most of the participants in the RTW programme gain between RM601 to RM1,200 as their salary, followed by RM1,201 to RM1,800.

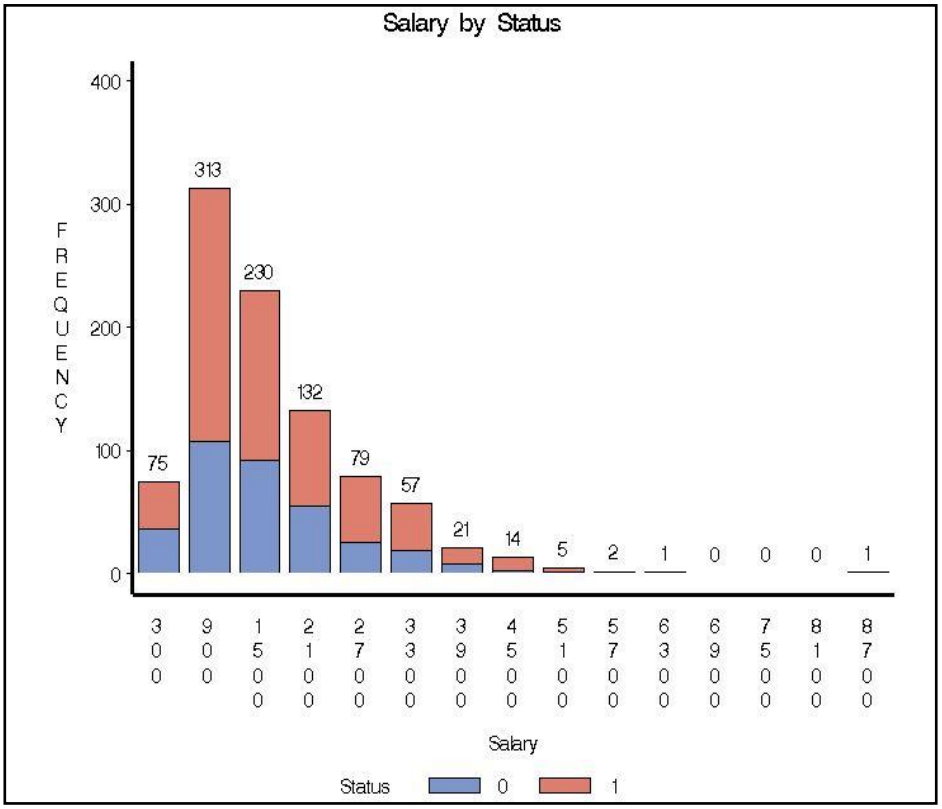

Figure 7: Frequency of Participants According to Salary

Conclusion and Recommendation

Based on the results obtained in the previous topics, the first objective, which discussed the characteristics of the RTW participants, has been successfully achieved. The results show that most of the participants of the RTW programme are usually aged 30 to 39 and have secondary level education. Most of the participants were male and Malay. Furthermore, participants with income levels of RM 601 to RM 1,200 were the highest contributors to the RTW programme. The manufacturing sector recorded the highest number of employment injuries (Chek et al., 2021).

Table 3
Summary of Study for Objective One

Element	**Summary**
Objective 1	To identify the participant's characteristics in RTW program.
Method	Descriptive Analysis using SAS E-Miner
Result	• Age (20-29 years has 18.38%, 30-39 years has 38.60%, 40-49 years has 29.03%, 50-59 years has 13.98%) • Education (Primary school has 16.77%, Secondary School has 61.83%, Tertiary School has 16.77%) • Gender (Male has 81.08%, Female has 18.92%) • Race (Malay has 60%, Chinese has 13.23%, Indian has 21.72%, other has 5.05%) • Industry (Construction; 6.34%, Trading; 11.72%, Manufacturing; 31.61, Services; 20.86%, Electrical, electronics, gas, water, or sanitary service; 6.13%, Agriculture, forestry, fishery; 3.87%, Public services; 2.68%, Transportation; 7.85%, Financial institution or insurance; 1.4%, Mining and quarrying; 1.18%, Others or not employed; 8.49) • Salary (RM 0 to RM 600 is 8.06%; RM601 to RM1 200 is 33.68%; RM1,201 to RM1,800 is 24.73%; RM1,801 to RM 2,400 is 14.19%; RM2,401 to RM3,000 is 8.49%; RM3,001 to RM3,600 is 6.12%; RM3,601 to RM4,200 is 2.26%; RM4,201 to RM4,800 is 1.51%; RM4,801 to RM5,400 is 0.54%; RM5,401 to RM6,000 is 0.22%; RM6,001 to RM6,600 is 0.11%; RM8,401 to RM8,800 is 0.11%)

Based on the main objective, it is found that most RTW participants are usually aged around 30 to 39 with secondary level education. Most of them are male and Malay. The highest contributors to the RTW programme are participants with income levels of RM 601 to RM1,200. The manufacturing sector recorded the highest number of employment injuries. Thus, SOCSO is recommended to increase the number of awareness programmes for employers of the majority groups identified in this study regarding safety and health to ensure that injuries can be reduced (Chek et al., 2018a; Zulkifli et al., 2012).

The study proposes several recommendations for future researchers interested in undertaking further research on the RTW programme. The data used in this research only involved 1,552 participants of the RTW programme. If future researchers can obtain a larger amount of data, the results will be more accurate and reliable (Liou et al., 2008).

Moreover, this study has only provided data concerning age, gender, race, sector, income level, and education level. Therefore, future researchers should obtain data with a greater number of variables, such as psychological-related factors and disease-related factors (Chek et al., 2019; Frees et al., 2009). Future researchers can also obtain data from other countries with similar programmes as RTW. The availability of such data will enable comparison between RTW-like programmes in different settings. Studies can also be undertaken by researching developed and developing countries to discover any similarities or differences that can contribute to RTW improvements (Chek et al., 2018b; Abas et al., 2013).

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