



JABATAN PERDANA MENTERI  
JABATAN PERANGKAAN MALAYSIA

# The Profile of Female Labour Force Participation in Malaysia Based on Recursive Partitioning Analyses

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**KOLOKIUUM**  
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# Introduction



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1. In determining the economic status of a country, one of the factors that will contribute to the economic development of the country is the availability of labour.
2. Equality and balance are important principles to consider in planning the socioeconomic development of a country.
3. The availability of highly skilled workforce is needed to support the transition of all economic sectors towards knowledge-intensive activities to generate labour productivity and attract more investor to invest in Malaysia.



# Methodology



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# Materials and methods

## Materials

The data used in this study are obtained from the Labour Force Survey (LFS) conducted by the Department of Statistics, Malaysia (DOSM). A survey conducted covers women aged 15-64 years (1990 and 2000) and 15 years and above (2010 and 2018) on their details in labour force involvement.

## Methods

The analytical approach for this study is to use the recursive partitioning (RP) techniques.





# Results and discussion



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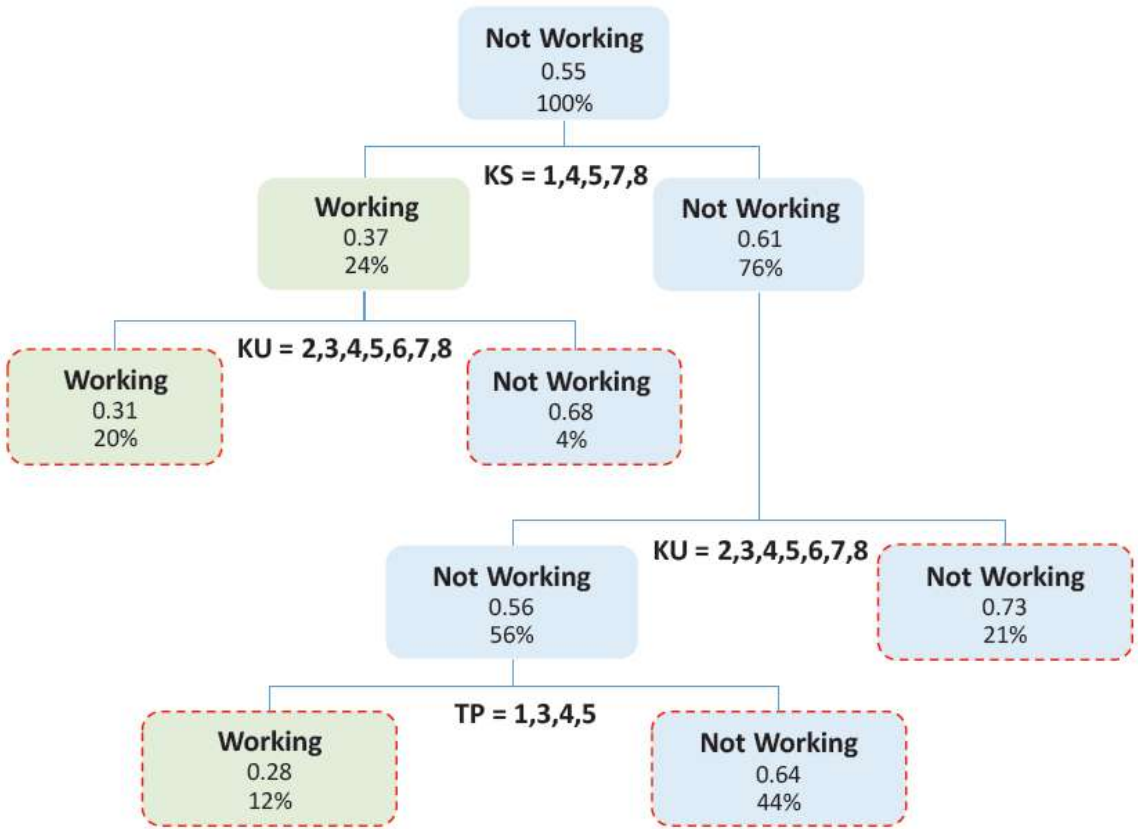
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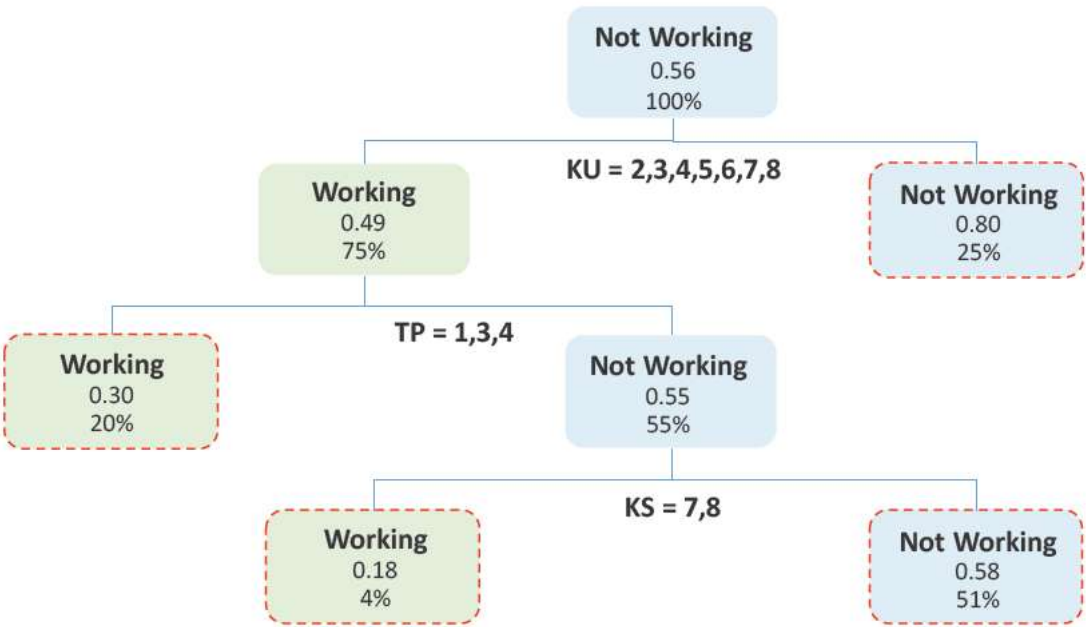


# Overall finding from recursive partitioning

(a)  
Female aged 15-64 years, 1990



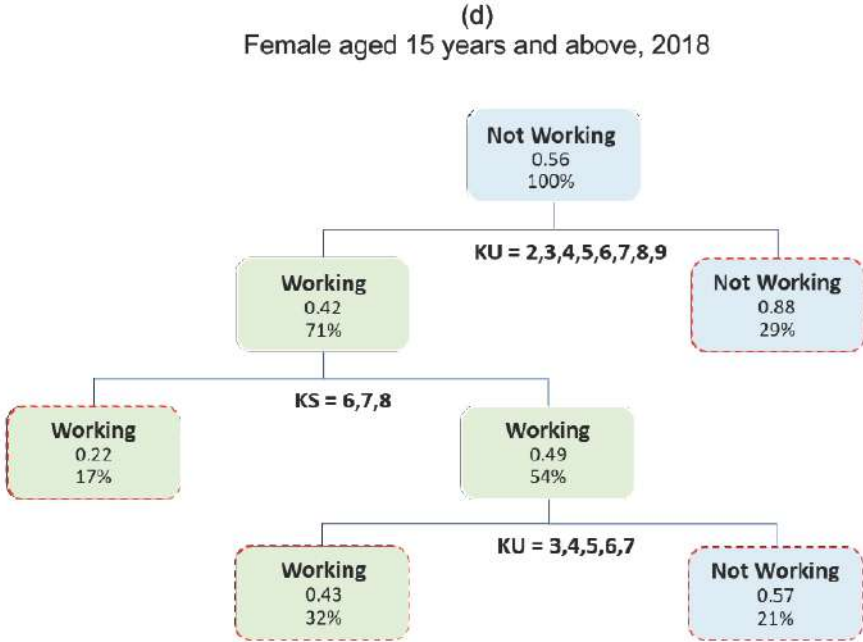
(b)  
Female aged 15-64 years, 2000







# Overall finding from recursive partitioning





# Overall finding from recursive partitioning

## a) Women work according to age

In 1990, 2000 and 2010 - began as early as age 20 and would leave the workforce at the age of 54 years. 2018 - still started working at age 20 years, exit workforce increased to 59 years.

## b) Working women and education

In 1990, as early as the completion of Sijil Pelajaran Malaysia (SPM), but from 2010 and 2018 many women start working after having a Diploma or at least skills certificate.

## c) Working women and marital status

In 1990, 2000 and 2010 - married women were more likely not to work. 2018, there was no difference between working status and category in marital status.

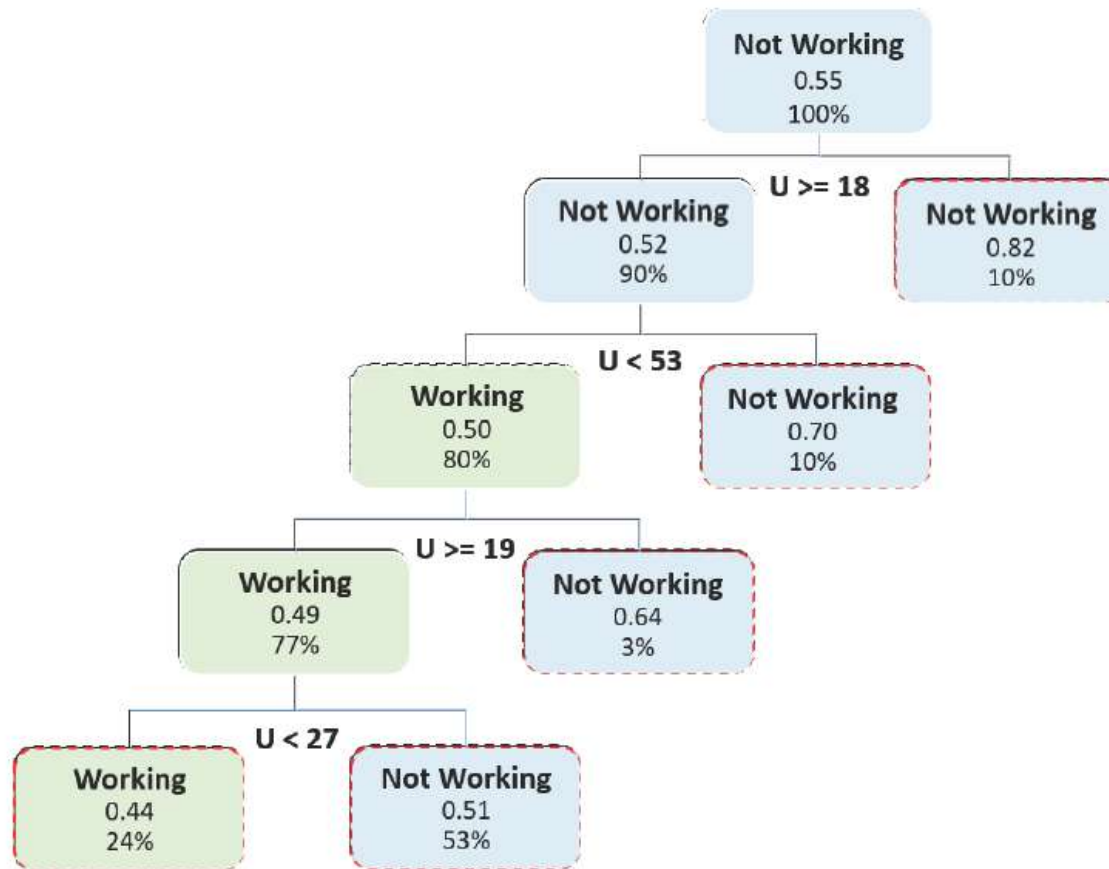




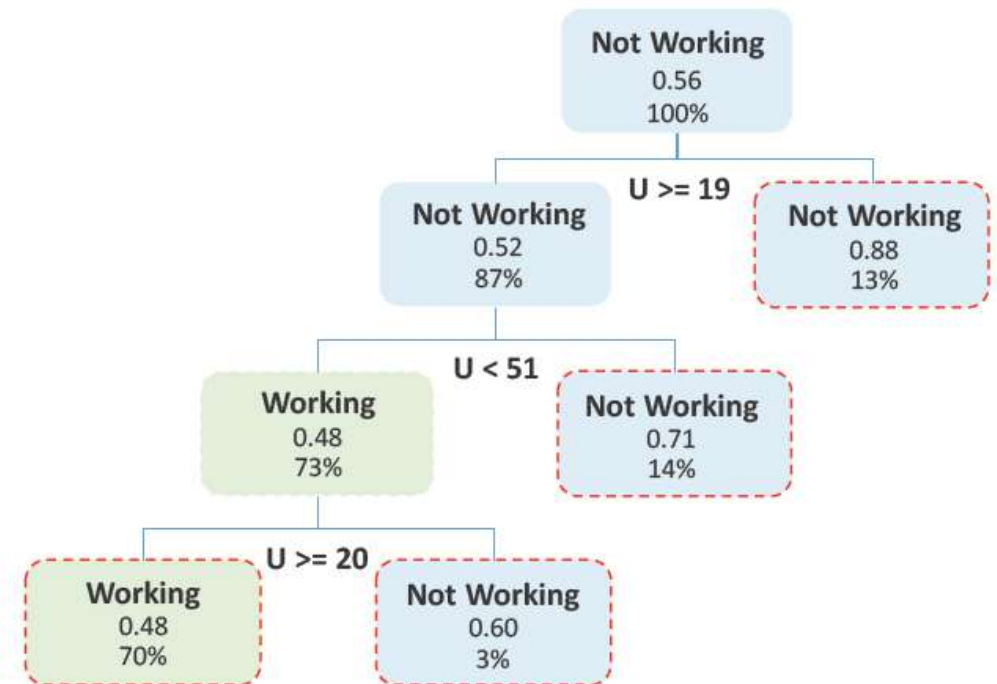
# Recursive partitioning by age

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(a)  
Women aged 15-64 years, 1990



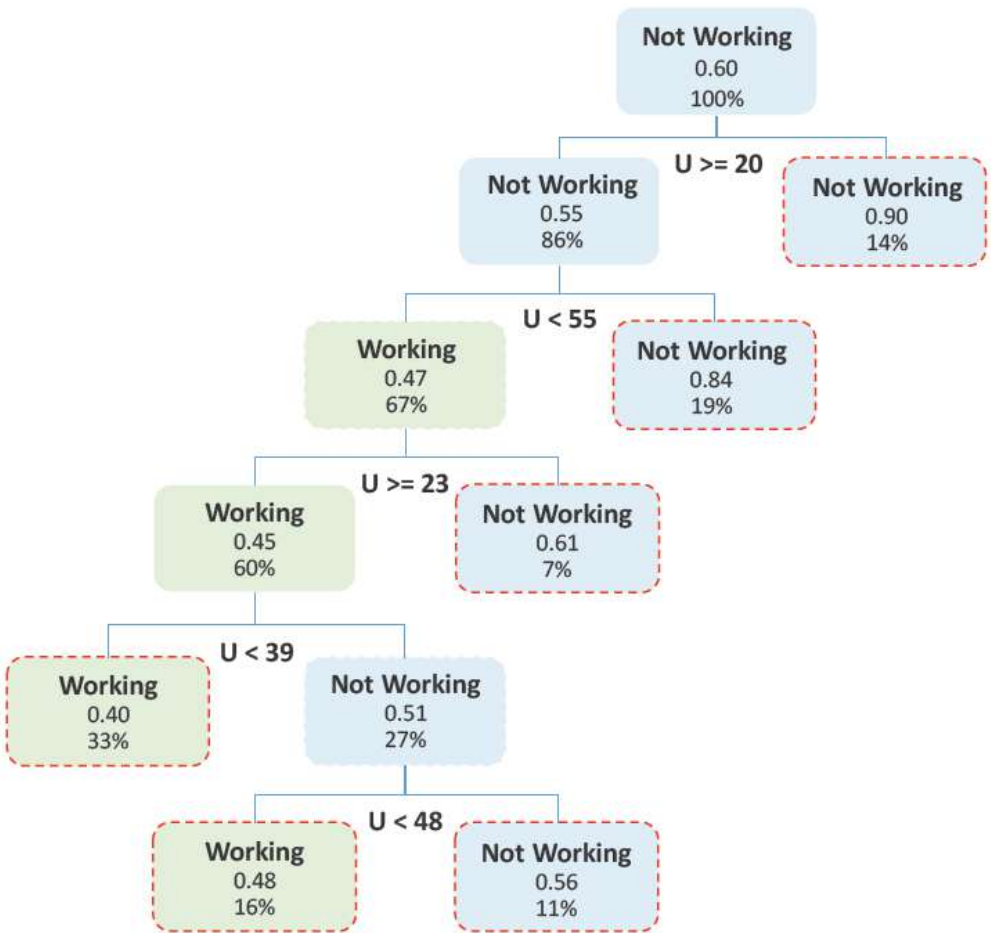
(b)  
Women aged 15-64 years, 2000



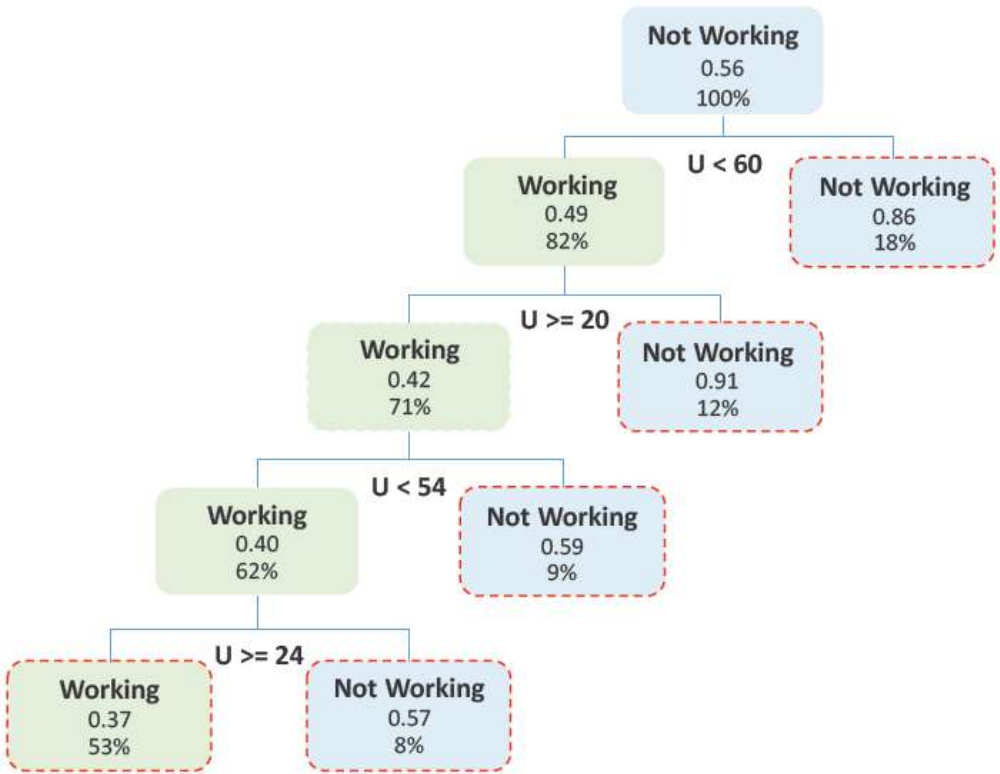


# Recursive partitioning by age

(c)  
Women aged 15 years and above, 2010



(d)  
Women aged 15 years and above, 2018







# Computing the misclassification rate

**Table 4.** Summary of the simulations

Year	Real Sample	Time (mm:ss)	Misclassification Rate	Standard Deviation
2018	126 311	00:27.0	30.4318	0.6554
2010	141 982	00:24.1	28.7932	0.6301
2000	67 124	00:26.0	32.4748	0.5054
1990	40 106	00:25.6	32.0684	0.5919

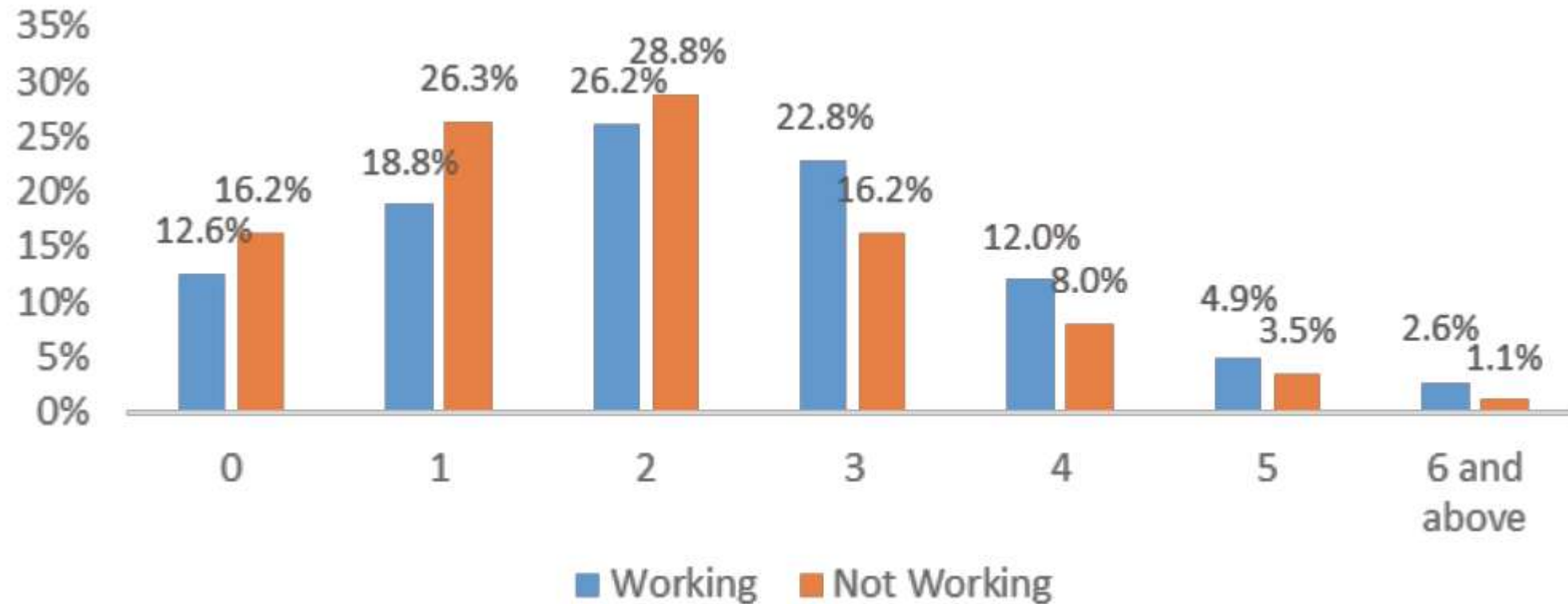






# Testing for one selected group

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**Figure 3.** Percentage of employed status by number of children.



# Conclusions



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1. Women start entering the labour market as early as the age of 20 and exit the labour market as late as the age of 59, yet the age group of most working women is aged 24-53 years.
2. The marital status variable was not classified because there was no significant difference between labour force status and category in marital status. This shows that many women with married status are working.
3. Women with higher education are more likely to join employment than those with only SPM.



# TERIMA KASIH

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