

# Psychometric evaluation, prevalence and predictors of happiness among urban dwellers in a B40 community in Kuala Lumpur



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## INTRODUCTION

The World Happiness Report (WHR) for Malaysia was 80th on the world happiness ranking with a happiness score of 5.339 in 2019, a notable drop from the 35th place in 2018 with a happiness score of 6.322. Happiness has been linked to different sociodemographic, socioeconomic status and the person's basic necessities such as food, living provisions and health conveniences. The B40 community in Malaysia is used to represent those in the bottom 40% income group, with a median monthly household income of RM3000 and below. The disparity in socioeconomic status will cause many of them to face health challenges, nutritional issues and affect their quality of life, leading to a decrease in overall happiness index. In view of this, the objective of the study was to measure the happiness score in the B40 community and investigate the variables that affecting the happiness score in the B40 community.

Table 2: Binary logistic regression predicting Oxford Happiness score

Predictors	B	SE	Wald	df	p-value	OR (95% CI)
<b>Age</b>						
18-25	-	-	8.086	3	0.044	-
26-39	0.290	0.740	0.154	1	0.695	1.337 (0.313 – 5.702)
40-59	-0.300	0.695	0.187	1	0.666	0.741 (0.190 – 2.891)
>60	3.122	1.379	5.125	1	0.024	22.684 (1.521 – 338.423)
<b>Ethnicity</b>	-1.940	0.814	5.679	1	0.017	0.144 (0.029 – 0.709)

Table 3: Binary Logistic Regression Predicting RHI

Predictors	B	SE	Wald	df	p-value	OR (95% CI)
<b>Marital status</b>						
Married	-	-	2.933	2	0.231	-
Single	-0.734	0.572	1.649	1	0.199	0.480 (0.156 – 1.472)
Widowed	0.388	0.530	0.535	1	0.464	1.474 (0.521 – 4.165)
<b>Ethnicity</b>	-0.776	0.605	1.645	1	0.200	0.460 (0.140 – 1.507)
<b>Education level</b>						
Primary and below	-	-	1.398	2	0.497	-
Secondary	0.668	0.696	0.923	1	0.337	1.951 (0.499 – 7.625)
Tertiary	0.184	0.895	0.042	1	0.837	1.202 (0.208 – 6.945)

Age and ethnicity can be used to predicting factors of Oxford Happiness Score.

Sociodemographic factors are not predicting factors for RHI scores.

Table 4: Pearson correlation coefficient between Happiness score and different domains of quality of life (QoL)

Domains of QoL	OH score correlation coefficient (r)	P-value	RHI score correlation coefficient (r)	P-value
Physical health	0.507	<0.001	0.304	0.001
Psychological	0.596	<0.001	0.321	0.001
Social relationships	0.590	<0.001	0.246	0.011
Environmental	0.469	<0.001	0.197	0.042

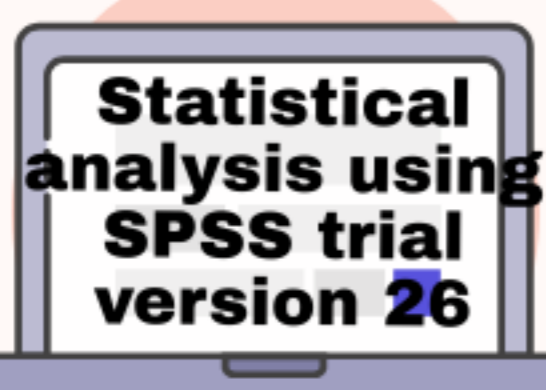
Table 5: OH score and RHI score by mental health status

Factors	OH score (mean ± SD)	p-value	RHI score [median, (IQR)]	p-value
<b>Depression</b>				
No	4.51 ± 0.62	<0.001	4.18, 2.21	<0.001
Yes	4.01 ± 0.59		2.33, 1.92	
<b>Anxiety</b>				
No	4.45 ± 0.64	0.048	4.14, 2.60	0.012
Yes	4.17 ± 0.65		2.86, 2.43	
<b>Stress</b>				
No	4.55 ± 0.59	<0.001	3.69, 2.37	0.001
Yes	4.04 ± 0.61		2.50, 2.53	

## METHODOLOGY

Residents of PPR Sri Pantai given Oxford Happiness Questionnaire (OHQ) and Rana's Happiness Index (RHI) via google form and face to face interview (n=107)

## DATA COLLECTION



- Reliability test (Cronbach's alpha analysis)
- Exploratory factor analysis
- Kolmogorov-Smirnov Test of Normality
- One-way Univariate analysis of variance
- Non-parametric tests
- Bivariate correlation
- Binary logistic regression
- Pearson correlation

## RESULTS

Among the 107 respondents, the mean age was 42.76 ± 12.31 years old, with females being the majority (n = 90; 84.1%). The respondents were mainly Malay (n = 91; 85.0%). Among the participants, a majority of the population is married (n = 64; 59.8%), has obtained a secondary level of education (n = 80; 74.8%) and are employed (n = 51; 47.7%).

Reliability coefficient of the measure for Malay version of the OHQ and RHI were determined using Cronbach  $\alpha$  analysis at  $\alpha = 0.826$  and  $0.628$ , respectively.

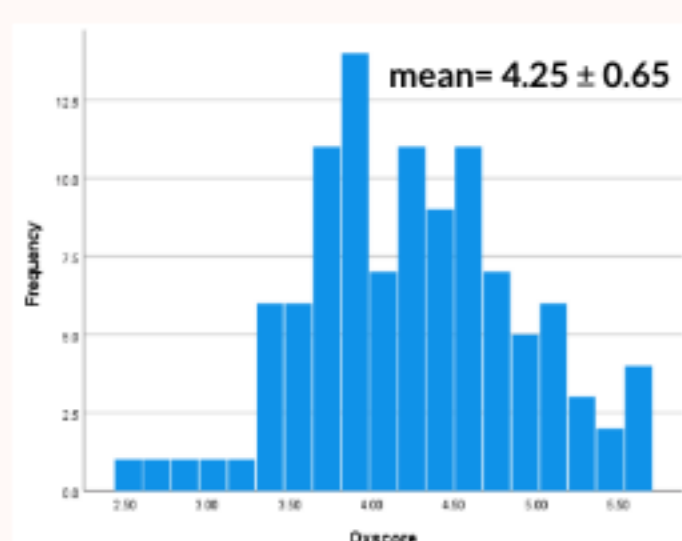


Figure 1: Distribution of Oxford Happiness (OH) Score

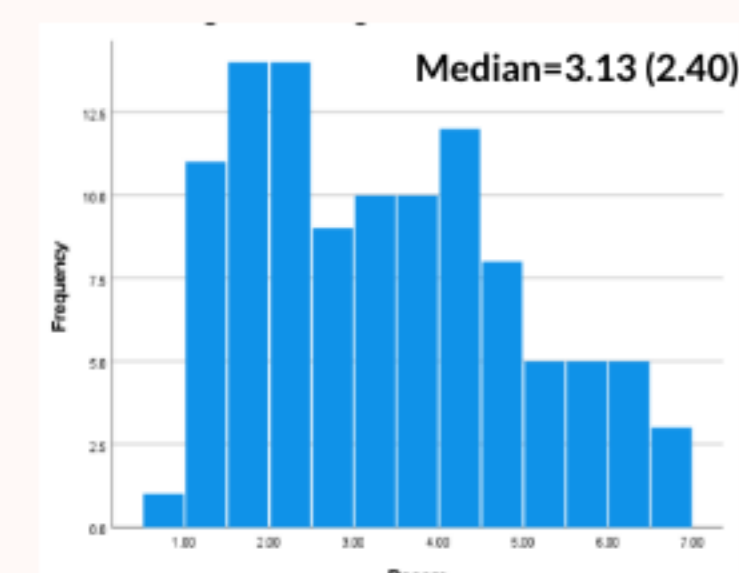


Figure 2: Distribution of RHI score

Table 1: OH score and RHI score by sociodemographic background (n=107)

Sociodemographic	OH score (mean ± SD)	RHI score [median (IQR)]
<b>Age</b>		
18-25	4.05 ± 0.68	2.31 (2.00)
26-39	4.14 ± 0.60	3.00 (2.31)
40-59	4.21 ± 0.60	3.44 (2.69)
>60	5.08 ± 0.51*	3.56 (3.83)
<b>Gender</b>		
Male	4.18 ± 0.65	3.00 (3.12)
Female	4.27 ± 0.66	3.17 (2.22)
<b>Marital status</b>		
Single	4.07 ± 0.69	2.39 (1.43)
Married	4.23 ± 0.64	3.35 (2.47)
Widowed	4.51 ± 0.58	4.20 (3.51)
<b>Ethnicity</b>		
Malay	4.29 ± 0.63	3.33 (2.67)
Non-Malay	4.06 ± 0.76	2.39 (2.64)
<b>Education level</b>		
Primary and below	4.35 ± 0.64	2.43 (2.62)
Secondary	4.30 ± 0.63	3.40 (2.58)
Tertiary	3.96 ± 0.74	2.58 (2.38)
<b>Employment status</b>		
Unemployed	4.26 ± 0.64	2.64 (2.14)
Employed	4.20 ± 0.61	3.50 (2.56)
Housewife	4.32 ± 0.72	3.06 (2.86)

\*p<0.001

## Conclusion

The overall OH and Rana's Happiness index scores of the community were found as 4.25 ± 0.65 and 3.13 (2.40), respectively. The OH score of the respondents aged more than 60 years old are significantly higher than others. However, the happiness scores were essentially similar for other sociodemographic parameters. In this study, sociodemographic parameters of age and ethnicity were found as predictors for OHQ score, but sociodemographic parameters were not the predictors for RHI score. A strong positive correlation was found between the different domains of QoL and OH scores. As for the RHI scores, there is a strong correlation between RHI scores and physical and psychological domains of QoL, however, there appears to be a weak correlation between the social and environmental domains of QoL with RHI score. The OHQ and RHI happiness scores were found significantly lower for the respondents suffers from depression, stress and anxiety.

## Recommendation

Future studies should be conducted with a larger study population and more diverse sample with a longer time frame and funding as well as the further usage of RHI.

## References:

