

# “Getting Every Smoker to Participate and Quit - GEMPAQ V2.0” a Personalised Smoking Cessation Smartphone Application in Malaysia: A Pilot Randomised Controlled Trial

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## Introduction

- Despite longstanding tobacco control efforts, **19% of Malaysians still smoke cigarettes.**
- Smoking continues to pose **serious health risks.**
- Smartphone apps** offer practical and accessible tools for smoking cessation.



## Study Aims

- To **evaluate the effectiveness** of a novel smoking cessation smartphone app.
- The app is **tailored to users' five-factor personality traits.**
- Goal: To **increase smoking quit rates** through personalized intervention.

## Results

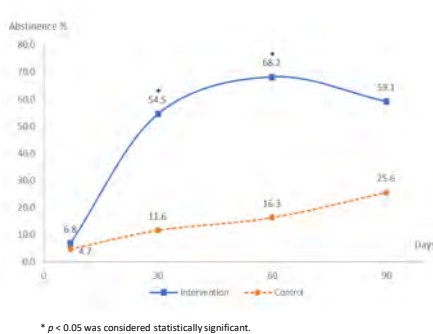
Table 1: Baseline Data of Participants

Characteristics	Intervention Personalised Version (n = 44) n (%)	Control Basic Version (n = 43) n (%)	Total (n = 87) n (%)	p-Value
Sex				
Male	40 (90.9)	37 (86.0)	77 (88.5)	0.477
Female	4 (9.1)	6 (14.0)	10 (11.5)	
Age (mean (SD)) years	35.3 (10.22)	41.6 (13.27)	38.5 (11.75)	0.014*
Ethnicity				
Malay	30 (68.2)	16 (37.2)	46 (52.7)	0.014*
Chinese	5 (11.4)	9 (20.9)	14 (16.2)	
Indian	1 (2.3)	7 (16.3)	8 (9.3)	
Others	8 (18.2)	11 (25.6)	19 (21.8)	
Marital Status				
Married/Cohabiting	23 (52.3)	27 (62.8)	50 (57.5)	0.067
Separated/Divorced/Widowed	1 (2.3)	5 (11.6)	6 (6.9)	
Single	20 (45.5)	11 (25.6)	31 (35.6)	
Education				
Low (upper secondary and lower)	22 (50.0)	22 (51.2)	44 (50.6)	0.919
Moderate (diploma certificate)	7 (15.9)	8 (18.3)	15 (17.2)	
High (university and higher)	15 (34.1)	13 (30.2)	28 (32.2)	
Employment Status				
Full Time	32 (72.7)	36 (83.7)	68 (78.2)	0.414
Part Time	2 (4.5)	3 (7.0)	5 (5.7)	
Unemployed/Retired/Others	7 (15.9)	3 (7.0)	10 (11.5)	
Student	3 (6.8)	1 (2.3)	4 (4.6)	
Monthly Income				
Low (less than USD1088)	37 (84.1)	23 (53.5)	60 (69.0)	0.003*
Middle (USD1089 to USD2461)	4 (9.1)	16 (37.2)	20 (23.0)	
High (USD2462 and above)	3 (6.8)	4 (9.3)	7 (8.0)	
Smoking Behaviour				
Age started smoking years (mean (SD))	18.3 (3.26)	17.1 (2.51)	17.7 (2.89)	0.049*
Cigarettes per day (mean (SD))	8.5 (6.08)	10.2 (4.96)	9.4 (5.52)	0.150
At least one prior quit attempt	29 (65.9)	17 (39.5)	46 (52.9)	0.018*

\*p < 0.05

## Methods

- An automated, parallel, 2-group: intervention (personalised app), control (placebo using basic app), **double-blinded, randomised controlled pilot trial** with a 12-week.
- Generalised Estimating Equations analysis was applied to repeatedly measure the primary outcome, self-reported abstinence, throughout the trial.



\*p < 0.05 was considered statistically significant.

Figure 1: 7-day PPA Self-Reported Abstinence - CCA

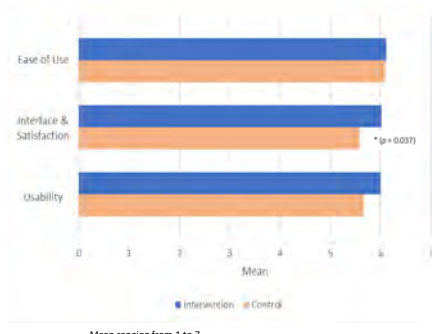


Figure 2: mHealth App Usability Questionnaire (MAUQ) Outcomes

## Conclusion

- ✓ Smokers' cessation rates are higher among the intervention group
- ✓ This research provides preliminary evidence that using personalised smartphone cessation applications aids smoking cessation.

## Disclosure

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Please add "yes" or "no" to each table cell. If "yes", please turn cell background color to yellow.	Tobacco Industry	E-cigarette & nicotine product industry (excluding pharma)	Pharma Industry
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