

## Article

# Development of the Active Ageing Awareness Questionnaire in Malaysia

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**Supplementary Table S1.** English and Malay translation and reasons for exclusion of the Awareness of Active Ageing Questionnaire (AAAQ)

| Item No. | Item Text (English)  | Item Text (Malay)  | I-CVI <sup>a</sup> | ICC <sup>b</sup> | EFA <sup>c</sup> | CFA <sup>d</sup> | Reason for Exclusion   |
|----------|--|--|--------------------|------------------|------------------|------------------|--|
| 1        | In your opinion, what are the factors that make someone age actively?        | Pada pendapat anda, apakah faktor yang membolehkan seseorang itu menua secara aktif?   | 1.00               | -                | -                | -                | Included (open-ended item)   |
| 2        | In Malaysia, at what age a person is called as an 'older person'?            | Di Malaysia, pada umur berapakah seseorang itu dikatakan 'warga emas'?   | 0.67               | -                | -                | -                | Excluded I-CVI consensus (open-ended item)                                     |
| 3        | Have you ever heard about 'active ageing'?                                   | Pernahkah anda mendengar mengenai 'penuaan aktif'?   | 1.00               | -                | -                | -                | Included (open-ended item)   |
| 4        | Free from chronic diseases such as diabetes mellitus or heart disease        | Bebas dari penyakit kronik seperti kencing manis atau penyakit jantung   | 1.00               | 0.634            | 0.586            | 0.55             | Included   |
| 5        | Chronic diseases or diseases which is/are under controlled                   | Mempunyai penyakit kronik yang terkawal  | 1.00               | 0.628            | 0.239            | -                | Low factor loading for CFA   |
| 6        | Able to move around freely with or without disability or physical limitation | Tidak mempunyai masalah untuk bergerak ke mana-mana tidak kira samada mempunyai kecacatan anggota / masalah fizikal atau pun tidak | 1.00               | 0.696            | 0.601            | 0.59             | Included   |
| 7        | Regular physical activity or exercise  | Melakukan aktiviti fizikal atau senaman secara berkala   | 1.00               | 0.486            | 0.779            | 0.77             | Included   |
| 8        | Not smoking (cigarette, e-cigarette, pipes, cigar)                           | Tidak merokok (rokok dan "vaping")   | 1.00               | 0.788            | 0.654            | -                | Excluded, modification indices more than 15 indicate redundant with covariates |
| 9        | Eating healthy food  | Makan makanan yang sihat   | 1.00               | 0.624            | 0.882            | 0.87             | Included   |
| 10       | Not consuming alcoholic beverages  | Tidak mengambil minuman beralkohol   | 1.00               | 0.722            | 0.821            | 0.84             | Included   |
| 11       | Good oral health   | Tiada masalah kesihatan gigi   | 1.00               | 0.712            | 0.738            | 0.75             | Included   |
| 12       | Healthy minds  | Mempunyai minda yang sihat   | 1.00               | 0.690            | 0.886            | 0.86             | Included   |
| 13       | Good memory  | Daya ingatan yang bagus  | 1.00               | 0.584            | 0.867            | -                | Excluded cross-loading EFA   |
| 14       | Not feeling lonely   | Tidak merasa kesepian  | 1.00               | 0.677            | 0.754            | 0.74             | Included   |
| 15       | Continue working (part-time or full time) after compulsory retirement        | Meneruskan pekerjaan selepas tempoh persaraan wajib  | 1.00               | 0.751            | 0.340            | -                | Low factor loading for CFA   |

|    |  |   |      |       |       |      |  |
|----|--|---|------|-------|-------|------|--|
| 16 | Participate in voluntary activity. For example, volunteer in Flood Relief Team | Menyertai aktiviti kemanusiaan. Contohnya sukarelawan Bantuan Mangsa Banjir | 1.00 | 0.629 | 0.498 | 0.63 | Included   |
| 17 | Participate in social and community activity                                   | Terlibat dengan aktiviti sosial dan kemasyarakatan                          | 1.00 | 0.737 | 0.687 | 0.76 | Included   |
| 18 | Providing care for other older person  | Menjaga orang yang lebih tua dari kita                                      | 1.00 | 0.739 | 0.417 | -    | Low factor loading for CFA   |
| 19 | Providing care for grandchildren   | Menjaga cucu  | 1.00 | 0.754 | 0.064 | -    | Low factor loading for CFA   |
| 20 | Having a hobby such as gardening, fishing or baking                            | Mempunyai hobi seperti berkebun, memancing dan membuat kuih                 | 1.00 | 0.728 | 0.742 | 0.82 | Included   |
| 21 | Continue learning new things   | Sentiasa belajar perkara-perkara baru                                       | 1.00 | 0.608 | 0.742 | 0.81 | Included   |
| 22 | Have a good amount of saving for retirement                                    | Mempunyai wang simpanan yang mencukupi untuk bersara                        | 1.00 | 0.540 | 0.825 | 0.73 | Included   |
| 23 | Have own house   | Mempunyai tempat tinggal sendiri  | 1.00 | 0.787 | 0.923 | 0.82 | Included   |
| 24 | Safe living conditions   | Tempat tinggal yang selamat   | 1.00 | 0.691 | 0.974 | -    | Excluded, modification indices more than 15 indicate redundant with covariates |
| 25 | Safe neighbourhood   | Persekitaran kejiranan yang selamat   | 1.00 | 0.699 | 0.956 | -    | Excluded cross-loading EFA   |

Item Content Validity Index (I-CVI)—number of experts rating of three total number of experts.

<sup>a</sup>— Items with I-CVI  $\leq 0.69$  were excluded,  $0.69 < \text{I-CVI} < 0.90$  were individually assessed, I-CVI  $\geq 0.90$  were retained

Inter-item Correlation (ICC)—test-retest were conducted to assess the initial reliability of the questionnaire

<sup>b</sup>— Items with ICC was classified as: poor ( $< 0.4$ ), fair to good ( $0.4$  to  $< 0.75$ ) and excellent ( $\geq 0.75$ )

Exploratory Factor Analysis

<sup>c</sup>—Bartlett's test of sphericity with a significance level of less than 0.5 and a KMO of more than 0.7 or nearly 1.0 indicate that the items are suitable for structure detection and factor analysis and are useful for further analysis

Confirmatory Factor Analysis

<sup>d</sup>— Dimensionality is achieved when all the items have a factor loading of more than 0.5

Bold items are included in the final AAAQ. The grey cells indicate that items were excluded in the validation process.

Item 4-25— Items are rated according to a 4-point Likert scale from strongly disagree to strongly agree on what makes someone age actively