**Supplementary material 3- Results from the analysis to develop the SMILE-C**

**STEP 1**

**Variables excluded from the SMILE due to missing equal or higher than 2%:**

Q2, Q14, Q15, Q20, Q21, Q22, Q34, Q35, Q38, Q39, Q42, Q43

SMILE variables with missing values below 2% had missing values imputed as 0 (zero)

**STEP 2 – Overall reliability after exclusion**

**Table 1. Adjustment measures from Principal component analysis (PCA)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Tests** | | | **Value** |
| Cronbach's Alpha | | | 0.744 |
| KMO and Bartlett's Test | Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.768 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 6656.340 |
| Df | 465 |
| Sig. | 0.000 |

**STEP 3- Principal component analysis (PCA)**

**Table 2. Total variance explained by the components**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Component** | **Initial Eigenvalues** | | | | **Extraction Sums of Squared Loadings** | | | | **Rotation Sums of Squared Loadings** | | | |
| **Total** | **% of Variance** | **Cumulative %** | **Total** | | **% of Variance** | **Cumulative %** | **Total** | | **% of Variance** | **Cumulative %** |
| 1 | **4.249** | **13.707** | **13.707** | **4.249** | | **13.707** | **13.707** | **3.105** | | **10.017** | **10.017** |
| 2 | **2.160** | **6.967** | **20.674** | **2.160** | | **6.967** | **20.674** | **2.266** | | **7.309** | **17.326** |
| 3 | **1.835** | **5.920** | **26.594** | **1.835** | | **5.920** | **26.594** | **2.254** | | **7.272** | **24.598** |
| 4 | **1.626** | **5.246** | **31.840** | **1.626** | | **5.246** | **31.840** | **2.128** | | **6.865** | **31.463** |
| 5 | **1.522** | **4.909** | **36.749** | **1.522** | | **4.909** | **36.749** | **1.639** | | **5.286** | **36.749** |
| 6 | **1.436** | **4.633** | **41.383** |  | |  |  |  | |  |  |
| 7 | **1.256** | **4.051** | **45.433** |  | |  |  |  | |  |  |
| 8 | **1.171** | **3.776** | **49.209** |  | |  |  |  | |  |  |
| 9 | **1.054** | **3.399** | **52.608** |  | |  |  |  | |  |  |
| 10 | **1.003** | **3.235** | **55.844** |  | |  |  |  | |  |  |
| 11 | **0.964** | **3.108** | **58.952** |  | |  |  |  | |  |  |
| 12 | **0.947** | **3.055** | **62.007** |  | |  |  |  | |  |  |
| 13 | **0.901** | **2.906** | **64.913** |  | |  |  |  | |  |  |
| 14 | **0.843** | **2.719** | **67.632** |  | |  |  |  | |  |  |
| 15 | **0.836** | **2.697** | **70.329** |  | |  |  |  | |  |  |
| 16 | **0.788** | **2.541** | **72.870** |  | |  |  |  | |  |  |
| 17 | **0.773** | **2.493** | **75.363** |  | |  |  |  | |  |  |
| 18 | **0.724** | **2.335** | **77.698** |  | |  |  |  | |  |  |
| 19 | **0.707** | **2.279** | **79.977** |  | |  |  |  | |  |  |
| 20 | **0.697** | **2.249** | **82.226** |  | |  |  |  | |  |  |
| 21 | **0.645** | **2.080** | **84.306** |  | |  |  |  | |  |  |
| 22 | **0.617** | **1.992** | **86.298** |  | |  |  |  | |  |  |
| 23 | **0.605** | **1.952** | **88.250** |  | |  |  |  | |  |  |
| 24 | **0.579** | **1.867** | **90.117** |  | |  |  |  | |  |  |
| 25 | **0.534** | **1.721** | **91.839** |  | |  |  |  | |  |  |
| 26 | **0.521** | **1.679** | **93.518** |  | |  |  |  | |  |  |
| 27 | **0.439** | **1.417** | **94.935** |  | |  |  |  | |  |  |
| 28 | **0.423** | **1.363** | **96.299** |  | |  |  |  | |  |  |
| 29 | **0.399** | **1.286** | **97.585** |  | |  |  |  | |  |  |
| 30 | **0.379** | **1.224** | **98.809** |  | |  |  |  | |  |  |
| 31 | **0.369** | **1.191** | **100.000** |  | |  |  |  | |  |  |
| Extraction Method: Principal Component Analysis. | | | | | | | | | | | | |

**STEP 4-Excluding variables with communalities <0.20 at the PCA**

**Table 3. Matriz of communalities**

|  |  |  |
| --- | --- | --- |
| **Question** | **Initial** | **Extraction** |
| Q1 | **1.000** | **0.151** |
| Q3 | **1.000** | **0.381** |
| Q4 | **1.000** | **0.364** |
| Q5 | **1.000** | **0.429** |
| Q6 | **1.000** | **0.346** |
| Q7 | **1.000** | **0.311** |
| Q8 | **1.000** | **0.241** |
| Q9 | **1.000** | **0.329** |
| Q10 | **1.000** | **0.225** |
| Q11 | **1.000** | **0.201** |
| Q12 | **1.000** | **0.509** |
| Q13 | **1.000** | **0.061** |
| Q16 | **1.000** | **0.334** |
| Q17 | **1.000** | **0.461** |
| Q18 | **1.000** | **0.618** |
| Q19 | **1.000** | **0.156** |
| Q23 | **1.000** | **0.514** |
| Q24 | **1.000** | **0.483** |
| Q25 | **1.000** | **0.615** |
| Q26 | **1.000** | **0.670** |
| Q27 | **1.000** | **0.139** |
| Q28 | **1.000** | **0.570** |
| Q29 | **1.000** | **0.305** |
| Q30 | **1.000** | **0.399** |
| Q31 | **1.000** | **0.539** |
| Q32 | **1.000** | **0.470** |
| Q33 | **1.000** | **0.310** |
| Q34 | **1.000** | **0.332** |
| Q35 | **1.000** | **0.365** |
| Q40 | **1.000** | **0.175** |
| Q41 | **1.000** | **0.389** |

**STEP 5- Overall reliability after new exclusion**

**Table 4. Adjustment measures from Principal component analysis (PCA)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Tests** | | | **Value** |
| Cronbach's Alpha | | | 0.747 |
| KMO and Bartlett's Test | Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.770 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 6166.628 |
| Df | 351 |
| Sig. | 0.000 |

**STEP 6- PCA 2**

**Table 5. Total variance explained by the components**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Component** | **Initial Eigenvalues** | | | **Extraction Sums of Squared Loadings** | | | **Rotation Sums of Squared Loadings** | | |
| **Total** | **% of Variance** | **Cumulative %** | **Total** | **% of Variance** | **Cumulative %** | **Total** | **% of Variance** | **Cumulative %** |
| 1 | **4.141** | **15.335** | **15.335** | **4.141** | **15.335** | **15.335** | **2.607** | **9.654** | **9.654** |
| 2 | **2.114** | **7.830** | **23.165** | **2.114** | **7.830** | **23.165** | **2.279** | **8.442** | **18.096** |
| 3 | **1.817** | **6.729** | **29.894** | **1.817** | **6.729** | **29.894** | **2.221** | **8.224** | **26.320** |
| 4 | **1.555** | **5.758** | **35.652** | **1.555** | **5.758** | **35.652** | **1.908** | **7.068** | **33.388** |
| 5 | **1.487** | **5.509** | **41.161** | **1.487** | **5.509** | **41.161** | **1.566** | **5.799** | **39.187** |
| 6 | **1.344** | **4.979** | **46.141** | **1.344** | **4.979** | **46.141** | **1.517** | **5.619** | **44.806** |
| 7 | **1.123** | **4.158** | **50.298** | **1.123** | **4.158** | **50.298** | **1.483** | **5.492** | **50.298** |

**STEP 7- Final rotated component matrix**

**Table 6. Questions SMILE-C by components from Principal component analysis (PCA)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | |
| **Questions** | **Component** | | | | | | |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** |
| Q3.Do you eat processed food (frozen food such as pizza, French fries, puff pastries, deep-fried foods and canned foods)? | **-0.016** | **0.020** | **0.742** | **-0.021** | **-0.003** | **0.033** | **-0.103** |
| Q4. Do you eat fast-food, high-calorie sweet or fatty foods when you are stressed or sad? | **0.103** | **0.103** | **0.694** | **0.016** | **0.050** | **-0.019** | **-0.082** |
| Q5. Do you eat healthy foods such as fresh fruits, fresh vegetables, wholegrain, legumes or nuts? | **0.129** | **0.054** | **0.630** | **0.233** | **-0.002** | **0.075** | **0.066** |
| Q6. Do you keep a regular meal schedule? | **0.147** | **0.220** | **0.511** | **-0.022** | **0.189** | **0.011** | **0.132** |
| Q7. Do you share your main meals with friends or family? | **0.124** | **0.000** | **0.005** | **-0.009** | **-0.026** | **-0.048** | **0.728** |
| Q8. Do you drink 5 or more doses (men) or 4 or more doses (women) of alcoholic beverages on a single occasion, which means within 2 hours? | **-0.022** | **0.032** | **0.179** | **-0.103** | **-0.088** | **0.415** | **0.205** |
| Q9. Do you smoke tobacco (cigarette, electronic cigarette, cigar, pipe, smokeless tobacco)? | **-0.136** | **0.088** | **0.135** | **0.100** | **0.084** | **0.539** | **0.354** |
| Q10. Do you use marijuana or hashish? | **0.016** | **-0.018** | **-0.051** | **0.013** | **0.093** | **0.703** | **-0,104** |
| Q11. Do you use other drugs (cocaine, crack, amphetamines, ecstasy, opioids without medical prescription, and others)? | **0.119** | **-0.003** | **-0.056** | **-0.013** | **-0.036** | **0.695** | **-0.215** |
| Q12. Do you exercise for at least 30 minutes daily (or 150 minutes a week)? | **0.025** | **0.126** | **0.376** | **0.543** | **-0.107** | **0.100** | **0.208** |
| Q16. Do you make time to relax? | **0.217** | **0.274** | **-0.029** | **0.465** | **0.087** | **-0.119** | **-0.143** |
| Q17. Do you use any strategy or psychological support to deal with stress (for instance meditation, mindfulness or psychotherapy)? | **0.011** | **-0.104** | **-0.102** | **0.720** | **0.089** | **-0.063** | **-0.134** |
| Q18. Do you use physical strategies to deal with stress (for instance yoga, tai-chi, exercise)? | **0.026** | **0.004** | **0.175** | **0.788** | **0.028** | **0.059** | **0.141** |
| Q19. Do you practice a faith or religion? | **0.020** | **-0.142** | **-0.073** | **0.187** | **0.503** | **0.002** | **-0.033** |
| Q23. Do you feel that your life has a meaning? | **0.399** | **0.175** | **0.106** | **-0.019** | **0.628** | **-0.026** | **0.092** |
| Q24. Do you feel grateful for the life you have? | **0.406** | **0.179** | **0.071** | **-0.003** | **0.605** | **0.090** | **0.141** |
| Q25. Do you manage to sleep between 7 and 9 hours per night? | **0.078** | **0.808** | **0.028** | **0.123** | **-0.120** | **-0.034** | **0.026** |
| Q26. Do you feel rested with the number of hours you sleep? | **0.115** | **0.807** | **0.181** | **0.031** | **0.096** | **-0.001** | **-0.022** |
| Q28. Do you maintain a regular sleep schedule? | **0.018** | **0.685** | **0.287** | **0.038** | **0.185** | **0.039** | **0.009** |
| Q29. Do you use sleeping pills? | **0.035** | **0.416** | **-0.057** | **-0.172** | **-0.022** | **0.136** | **0.303** |
| Q30. Do you interact with your friends and/or relatives? | **0.678** | **-0.036** | **0.070** | **0.150** | **-0.242** | **-0.040** | **0.105** |
| Q31. Do you feel that you are part of a group of friends, the community or the society? | **0.765** | **0.095** | **0.193** | **-0.039** | **0.067** | **0.000** | **0.035** |
| Q32. Do you have someone you trust who listens to your problems or concerns? | **.695** | **0.096** | **0.090** | **0.023** | **0.055** | **0.042** | **0.114** |
| Q33. Do you have someone to help with everyday chores (for instance cooking, housekeeping, shopping)? | **.203** | **0.056** | **-0.065** | **0.051** | **0.051** | **-0.026** | **0.646** |
| Q36. Do you enjoy your leisure time? | **.448** | **0.205** | **-0.007** | **0.260** | **0.157** | **-0.017** | **0.093** |
| Q37. Do you make yourself available to support your significant ones? | **.554** | **-0.036** | **-0.023** | **-0.025** | **0.234** | **0.029** | **0.041** |
| Q41. Do you spend time on a computer / smartphone within one hour of going to sleep? | **-.197** | **0.104** | **0.306** | **-0.064** | **0.503** | **0.008** | **-0.115** |
| Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 6 iterations. | | | | | | | |