**Table 1. The proportion of variance for each principal component (PC) from the PC analysis of aperture shapes EFA descriptors.**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | PC1 | PC2 | PC3 | PC4 | PC5 | PC6 | PC7 | PC8 | PC9 | PC10 |
| Standard deviation | 0.050 | 0.025 | 0.021 | 0.019 | 0.013 | 0.012 | 0.008 | 0.007 | 0.007 | 0.006 |
| Proportion of variance | 0.538 | 0.142 | 0.097 | 0.083 | 0.038 | 0.034 | 0.014 | 0.011 | 0.011 | 0.009 |
| Cumulative proportion | **0.538** | **0.681** | **0.777** | 0.860 | 0.898 | 0.931 | 0.946 | 0.957 | 0.968 | 0.977 |

**Table 2. Correlation between each EFA descriptor and three major principal components.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | PC1 | PC2 | PC3 |
| A1 | -0.96\*\* | 0.18 | -0.16 |
| B1 | -0.86\*\* | 0.04 | 0.26 |
| C1 | -0.73\*\* | 0.28 | 0.45\* |
| D1 | -0.84\*\* | 0.16 | -0.35 |
| E1 | -0.55\*\* | 0.07 | 0.46\* |
| F1 | 0.17 | -0.16 | 0.16 |
| A2 | 0.06 | -0.1 | 0.42\* |
| B2 | 0.29 | 0.61\*\* | 0.3 |
| C2 | -0.18 | -0.61\*\* | -0.25 |
| D2 | 0.47\* | 0.27 | 0.07 |
| E2 | 0.11 | 0.29 | -0.11 |
| F2 | -0.1 | -0.18 | 0.65\*\* |
| A3 | 0.32 | 0.25 | 0.01 |
| B3 | -0.39\* | -0.42\* | -0.49\*\* |
| C3 | -0.47\* | -0.4\* | 0.32 |
| D3 | 0.96\*\* | -0.16 | 0.15 |
| E3 | 0.93\*\* | -0.17 | 0.06 |
| F3 | -0.03 | -0.13 | -0.68\*\* |
| A4 | -0.1 | -0.11 | 0.73\*\* |
| B4 | -0.43\* | 0.58\*\* | 0.52\*\* |
| C4 | -0.31 | -0.07 | 0.27 |
| D4 | -0.76\*\* | -0.16 | 0.37\* |
| E4 | -0.5\*\* | 0 | -0.44\* |
| F4 | -0.14 | 0.19 | 0.58\*\* |
| A5 | 0.2 | 0.02 | 0.35\* |
| B5 | 0.07 | 0.16 | -0.06 |
| C5 | 0.36\* | 0.87\*\* | 0.14 |
| D5 | -0.56\*\* | -0.54\*\* | 0.42\* |
| E5 | 0.06 | 0.6\*\* | -0.18 |
| F5 | 0.25 | -0.21 | 0.12 |

\*significant at 0.05

\*\* significant at 0.01