

1 Summaries of Reliability Analysis

1.1 Exploratory and Confirmatory Factor Analysis

Table 1: Summary of exploratory and confirmatory factor analysis for the adapted Portuguese IMMS

| | MR1 | MR3 | MR2 | MR4 |
|----------------------|--------|--------|--------|--------|
| Item12A | 0.863 | 0.222 | -0.219 | -0.069 |
| Item19A | 0.788 | 0.351 | 0.076 | -0.090 |
| Item04A | 0.795 | 0.167 | -0.106 | 0.127 |
| Item20A | 0.574 | 0.430 | 0.034 | 0.338 |
| Item16A | 0.667 | 0.398 | -0.114 | 0.064 |
| Item01A | 0.539 | 0.287 | -0.184 | 0.380 |
| Item15R | -0.034 | 0.114 | 0.523 | -0.493 |
| Item21R | -0.127 | -0.125 | 0.588 | -0.067 |
| Item10R | -0.279 | -0.002 | 0.701 | -0.033 |
| Item08R | 0.188 | -0.249 | 0.599 | 0.010 |
| Item13S | 0.330 | 0.774 | -0.204 | 0.029 |
| Item14S | 0.360 | 0.837 | -0.115 | 0.187 |
| Item17S | 0.343 | 0.667 | -0.112 | -0.252 |
| SS loadings | 3.549 | 2.460 | 1.649 | 0.640 |
| Cumulative Var | 0.273 | 0.462 | 0.589 | 0.638 |
| Proportion Explained | 0.428 | 0.297 | 0.199 | 0.077 |

CFI: 0.947; TLI: 0.973; df: 14.077; χ^2 : 16.547; p-value: 0.286; RMSEA: 0.059 [0, 0.143];
p-value(RMSEA): 1

1.2 Reliability Analysis

Table 2: Result of reliability analysis for the adapted Portuguese IMMS

| | Global | Ont.Gamified | W.O.Gamified |
|---------------------|--------|--------------|--------------|
| Level of Motivation | 0.874 | 0.886 | 0.866 |
| Attention | 0.900 | 0.924 | 0.881 |
| Relevance | 0.696 | 0.725 | 0.684 |
| Satisfaction | 0.876 | 0.884 | 0.889 |