Supplementary Table 1. Multiple linear regression with IRT corrected IOI-HA scores from Leijon *et al*., 2020.

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| --- | --- | --- |
|  | **First-time users (n=1090)** | **Experienced users (n=417)** |
|  | **Factor 1** | **Factor 2** | **Total IOI-HA** | **Factor 1** | **Factor 2** | **Total IOI-HA** |
| Adj. R2=0.31,Prob>F =0.00 | Adj. R2=0.10,Prob>F =0.00 | Adj. R2=0.21,Prob>F =0.00 | Adj. R2=0.14,Prob>F =0.00 | Adj. R2=0.14,Prob>F =0.00 | Adj. R2=0.13,Prob>F =0.00 |
| **Explanatory variable:** | *Coef. (95%CI)* | *p* | *Coef. (95%CI)* | *p* | *Coef. (95%CI)* | *p* | *Coef. (95%CI)* | *p* | *Coef. (95%CI)* | *p* | *Coef. (95%CI)* | *p* |
| Degree of HL (ref. mild HL) |  |  |  |  |  |  |  |  |  |  |  |  |
|  Normal | -0.58 | (-1.28;0.11) | 0.10 | -0.19 | (-0.69;0.30) | 0.44 | -0.78 | (-1.80; 0.24) | 0.14 | -0.53 | (-3.04; 1.98) | 0.68 | -0.81 | (-2.88;1.27) | 0.45 | -1.30 | (-5.40; 2.80) | 0.53 |
|  Moderate | 0.82 | (0.39;1.25) | **<0.01** | -0.44 | (-0.75;-0.13) | **0.01** | 0.38 | (-0.26; 1.01) | 0.25 | 1.26 | (0.40; 2.13) | **<0.01** | 0.42 | (-0.30;1.14) | 0.25 | 1.78 | (0.36; 3.20) | **0.01** |
|  Moderate-Severe | 0.07 | (-0.81;0.95) | 0.88 | -0.77 | (-1.40;-0.15) | **0.02** | -0.71 | (-2.00; 0.59) | 0.28 | 0.84 | (-0.24; 1.92) | 0.13 | -0.85 | (-1.75;0.04) | 0.06 | 0.05 | (-1.71; 1.82) | 0.95 |
|  Severe & Profound | -0.90 | (-3.38;1.58) | 0.48 | -2.69 | (-4.46;-0.92) | **<0.01** | -3.59 | (-7.23; 0.05) | 0.05 | -0.41 | (-1.99;1.16) | 0.61 | -2.16 | (-3.46;-0.86) | **<0.01** | -2.53 | (-5.10; 0.04) | 0.05 |
| WRS (best ear) | 0.01 | (-0.01;0.04) | 0.27 | 0.04 | (0.02;0.05) | **<0.01** | 0.05 | (0.02; 0.09) | **<0.01** | 0.01 | (-0.02;0.04) | 0.44 | 0.02 | (-0.01;0.04) | 0.13 | 0.03 | (-0.02; 0.08) | 0.23 |
| Motivation | 0.30 | (0.21;0.39) | **<0.01** | -0.13 | (-0.20;-0.06) | **<0.01** | 0.17 | (0.03; 0.31) | **0.02** | 0.09 | (-0.12;0.31) | 0.40 | -0.33 | (-0.51;-0.15) | **<0.01** | -0.24 | (-0.59; 0.11) | 0.19 |
| HA usage time | 0.38 | (0.34;0.42) | **<0.01** | 0.09 | (0.06;0.12) | **<0.01** | 0.47 | (0.41; 0.52) | **<0.01** | 0.20 | (0.14;0.26) | **<0.01** | 0.07 | (0.02;0.12) | **0.01** | 0.26 | (0.16; 0.36) | **<0.01** |
| HA configuration (ref. bilateral) | -0.33 | (-1.31;0.65) | 0.51 | -0.01 | (-0.71;0.69) | 0.98 | -0.33 | (-1.77; 1.11) | 0.65 | -1.52 | (-3.80;0.77) | 0.19 | 0.15 | (-1.73;2.03) | 0.88 | -1.34 | (-5.06; 2.37) | 0.48 |
| Tinnitus (ref: no tinnitus) | 0.33 | (-0.15;0.80) | 0.18 | -0.54 | (-0.88;-0.20) | **<0.01** | -0.21 | (-0.91; 0.49) | 0.55 | -0.07 | (-0.93;0.78) | 0.87 | -0.36 | (-1.07;0.35) | 0.32 | -0.42 | (-1.82; 0.97) | 0.55 |
| Asymmetric HL (ref. symmetric HL)  | -0.15 | (-0.62;0.32) | 0.53 | -0.38 | (-0.71;-0.04) | **0.03** | -0.53 | (-1.22; 0.16) | 0.13 | 0.85 | (0.02;1.68) | 0.05 | 0.10 | (-0.59;0.78) | 0.79 | 0.95 | (-0.40; 2.31) | 0.17 |
| Sex (ref. men) | 0.27 | (-0.10;0.64) | 0.15 | 0.25 | (-0.01;0.52) | 0.06 | 0.52 | (-0.02; 1.07) | 0.06 | -0.97 | (-1.63;-0.32) | **<0.01** | -0.66 | (-1.21;-0.12) | **0.02** | -1.69 | (-2.76; -0.62) | **<0.01** |
| Age, years | -0.03 | (-0.05;-0.01) | **0.01** | 0.01 | (-0.01;0.02) | 0.44 | -0.02 | (-0.05; 0.01) | 0.14 | -0.01 | (-0.04;0.03) | 0.73 | -0.01 | -0.04;0.01) | 0.34 | -0.02 | (-0.07;0.03) | 0.45 |
| Constant | -6.01 | (-8.93;3.10) | 0.00 | -2.14 | (-4.22;-0.06) | 0.04 | -8.09 | (-12.4; -3.81) | 0.00 | -3.82 | (-8.32;0.67) | 0.10 | 1.87 | -1.84;5.59 | 0.32 | -1.77 | -9.10;5.57 | 0.64 |

Supplementary Table 2A. Bonferroni-Holm corrected p-values for original IOI-HA scores.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **First-time usersTotal IOI-HA** | **Experienced users****Total IOI-HA** | **First-time users****Factor 1** | **First-time users****Factor 2** | **Experienced users****Factor 1** | **Experienced users****Factor 2** |
| Degree of hearing loss  |  |  |  |  |  |  |
|  Normal | 0.847 | 1.000 | 0.752 | 1.000 | 1.000 | 1.000 |
|  Moderate | 0.876 | 0.220 | <0.001\* | 0.032\* | 0.080 | 1.000 |
|  Moderate-Severe | 0.876 | 1.000 | 1.000 | 0.066 | 1.000 | 0.528 |
|  Severe & Profound | 0.621 | 0.387 | 1.000 | 0.032 | 1.000 | 0.011\* |
| WRS (best ear) | 0.055 | 1.000 | 1.000 | <0.001\* | 1.000 | 0.819 |
| Motivation | 0.090 | 1.000 | <0.001\* | <0.001\* | 1.000 | <0.001\* |
| HA usage time | <0.001\* | <0.001\* | <0.001\* | <0.001\* | <0.001\* | 0.100 |
| HA configuration (ref. bilateral) | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| Tinnitus (ref: no tinnitus) | 1.000 | 1.000 | 0.798 | 0.018\* | 1.000 | 1.000 |
| Asymmetric HL (ref. symmetric HL)  | 0.847 | 1.000 | 1.000 | 0.180 | 0.387 | 1.000 |
| Sex (ref. men) | 0.800 | 0.022\* | 1.000 | 0.348 | 0.044\* | 0.162 |
| Age. years | 0.847 | 1.000 | 0.090 | 1.000 | 1.000 | 1.000 |

P-values <0.05 are marked with (\*)

Supplementary Table 2B. Bonferroni-Holm corrected p-values for IRT corrected IOI-HA scores (ref. Leijon *et al*., 2020).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **First-time****users****Total IOI-HA** | **Experienced****users****Total IOI-HA** | **First-time****users****Factor 1** | **First-time****users****Factor 2** | **Experienced****users****Factor 1** | **Experienced****users****Factor 2** |
| Degree of hearing loss  |  |  |  |  |  |  |
|  Normal | 0.938 | 1.000 | 0.808 | 1.000 | 1.000 | 1.000 |
|  Moderate | 0.984 | 0.140 | 0.000\* | 0.035\* | 0.044\* | 1.000 |
|  Moderate-Severe | 0.984 | 1.000 | 1.000 | 0.096 | 1.000 | 0.496 |
|  Severe & Profound | 0.477 | 0.486 | 1.000 | 0.024\* | 1.000 | 0.011\* |
| WRS (best ear) | 0.044\* | 1.000 | 1.000 | <0.001\* | 1.000 | 0.889 |
| Motivation | 0.160 | 1.000 | <0.001\* | <0.001\* | 1.000 | <0.001\* |
| HA usage time | <0.001\* | <0.001\* | <0.001\* | <0.001\* | <0.001\* | 0.110 |
| HA configuration (ref. bilateral) | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| Tinnitus (ref: no tinnitus) | 1.000 | 1.000 | 1.000 | 0.018\* | 1.000 | 1.000 |
| Asymmetric HL (ref. symmetric HL)  | 0.938 | 1.000 | 1.000 | 0.135 | 0.405 | 1.000 |
| Sex (ref. men) | 0.480 | 0.022\* | 1.000 | 0.236 | 0.044\* | 0.153 |
| Age. years | 0.938 | 1.000 | 0.072 | 1.000 | 1.000 | 1.000 |

P-values <0.05 are marked with (\*)