Supplementary Material

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| **Question** | **VAS Scale** |
| How aware have you been of your tinnitus in the past week? | Not at all (0) Very (10) |
| How bothered by your tinnitus have you been in the past week? | Not at all (0) Very (10) |
| How strong/high in volume has your tinnitus been in the past week? | Very weak (0) Extremely strong (10) |
| How relaxed have you felt in the past week? | Very (0) Not at all (10) |
| How has your ability to concentrate been in the past week? | Very easy (0) Very difficult (10) |
| How has your mood been this past week? | Very good (0) Very bad (10) |

Supplementary Table 1. The VAS questions and scales. The questions are translated from Danish.

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| **Participant #** | **The three sound-therapy programs implemented @ Visit 2** | **Reason for the selection** |
| 1 | Breeze (F); Spring (F); Winter (F) | The frequency, rhythm, and absence of 'hissing/waves.' |
| 2 | Winter (F); Breeze (F); NA | I like them the best. More relaxing. |
| 3 | Blossom (S); Winter (S); Swells (N) | The tones were pleasing to my ears and the wave sound was pleasing and together they were very relaxing. Calmer soundscape. |
| 4 | Breeze (S); Summer (S); Autumn (S) | Relaxing and calming and help distract me from my tinnitus. Interesting to listening to. Unpredictable but not dominating. |
| 5 | Blossom (F); Summer (F); Winter (F) | They were the most comfortable and natural. The wave noises were confusing to listen to because they sounded like my tinnitus, and I wasn't sure at times if it was the waves or my tinnitus I was hearing. It was a little stressful to listen to. |
| 6 | Winter (F); Winter (S); Spring (S) | Happy sounding and light, good balance and harmony and very natural, no surprises. |
| 7 | Swells (N); Spring (S); Autumn (S) | I like the soundscapes where waves and tones are combined. I prefer the deeper tones. |
| 8 | Summer (S); Seaside (N); Swells (N) | I really like them if I need to listen to them for a long time. |
| 9 | Summer (F); Autumn (F); Seaside (F) | Seem the most relaxing, comfortable to listen to, little like a dreamland. |
| 10 | Spring (F); Breeze (F); Spring (S) | They were the most comfortable and natural. I like it where there are larger variations in the sound. It doesn't work for me when it is too flat or monotone. It is not as interesting to listen to and makes me more aware of my tinnitus. |
| 11 | Autumn (F); Breeze (S); Winter (F) | Frequency of the tones is generally in deeper range. It's ok that there are some high pitches now and then. |
| 12 | Swells (N); Seaside (N); Breeze (F) | Because they have calming effect. Something happens in my brain, and I feel more relaxed. Tension in the neck behind my ears is reduced a bit. |
| 13 | Seaside (N); Swells (N); Blossom (S) | I like the waves because they are a continuous noise that helps me be less aware of my tinnitus. I chose the soundscape because the pitch of the tones is deeper and more dynamic. |
| 14 | Summer (S); Autumn (S); Autumn (F) | Waves are generally relaxing combined with the deeper tones. |
| 15 | Autumn (F); Spring (F); Summer (F) | They are comfortable to listen to and soothing. Helps me focus less on my tinnitus. |
| 16 | Swells (N); Seaside (N); Autumn (S) | Most relaxing to listen to. |
| 17 | Swells (N); Springs (F); Autumn (S) | I like them the most. Very calming sounds. |
| 18 | Seaside (N); Blossom (S); Summer (S) | The waves remove the tinnitus better for me. I really like the sounds with waves because they are the most comfortable. |
| 19 | Winter (F); Autumn (F); Spring (S) | Most relaxing to listen to. |
| 20 | Swells (N); Blossom (F); Blossom (S) | Fit me the best. The other sounds were too sharp. |

Supplementary Table 2. The three preferred sounds and reasons for preference. The same descriptors are marked in the same color. Abbreviations: F – fractal; N – nature; S – soundscape.

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| **Dependent variable** | **Independent variable** | **Coefficient** | **95% CI** | ***P*-value** |
| Sound-Therapy Use | Time (reference: two-month follow-up) |  |  |  |
|  | Four-month follow-up | 0.66 | -0.33, 1.65 | .19 |
|  | Six-month follow-up | 0.00 | -0.97, 0.97 | .99 |
|  | Twelve-month follow-up | -1.19 | -2.16, -0.22 | *.02\** |
| Amplification-Only Use | Time (reference: two-month follow-up) |  |  |  |
|  | Four-month follow-up | 0.55 | -0.77, 1.87 | .41 |
|  | Six-month follow-up | 0.41 | -0.88, 1.70 | .54 |
|  | Twelve-month follow-up | -0.31 | -1.61, 0.98 | .64 |
| Total Device Use | Time (reference: two-month follow-up) |  |  |  |
|  | Four-month follow-up | 1.17 | -0.26, 2.60 | .11 |
|  | Six-month follow-up | 0.38 | -1.02. 1.77 | .60 |
|  | Twelve-month follow-up | -1.54 | -2.94, -0.14 | *.03\** |
| Proportion of Device Use | Sound type (reference: fractal tones) |  |  |  |
|  | Nature | -16.21 | -26.53, -5.89 | *.002\** |
|  | Soundscapes | -13.08 | -23.40, -2.75 | *.01\** |
|  | Amplification only | 30.08 | 19.75, 40.40 | *< .001\** |

Supplementary Table 3. Mixed-effects linear regression results for sound-therapy use, amplification-only use, total device use and device use proportions. The significant effects are indicated by an asterisk (\*) in the *P*-value column.

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| **Dependent variable** | **Independent variable** | **Coefficient** | **95% CI** | ***P*-value** |
|  | Time (reference: baseline) |  |  |  |
| THI Score | One month | -7.10 | -11.66, -2.54 | *.002\** |
|  | Two months | -10.30 | -14.86, -5.74 | *< .001\** |
|  | Four months | -9.96 | -14.99, -4.94 | *< .001\** |
|  | Six months | -11.93 | -16.85, -7.01 | *< .001\** |
|  | Twelve months | -11.68 | -16.60, -6.76 | *< .001\** |
|  | Hearing Loss | -0.01 | -0.54, 0.54 | .99 |
| TFI Score | One month | -5.14 | -11.05, 0.77 | .09 |
|  | Two months | -8.91 | -14.82, -3.00 | *.003\** |
|  | Four months | -15.01 | -21.51, -8.50 | *<.001\** |
|  | Six months | -13.04 | -19.42, -6.67 | *<.001\** |
|  | Twelve months | -12.84 | -19.21, -6.47 | *<.001\** |
|  | Hearing Loss | 0.23 | -0.28, 0.74 | .37 |
| Hyperacusis | Two months | -3.10 | -5.28, -0.92 | *.005\** |
|  | Four months | -3.08 | -5.50, -0.66 | *.01\** |
|  | Six months | -2.76 | -5.13, -0.39 | *.02\** |
|  | Twelve months | -1.63 | -4.00, 0.74 | .18 |
|  | Hearing Loss | 0.10 | -0.23, 0.42 | .56 |
| Tinnitus Awareness | One month | -0.48 | -1.54, 0.59 | .38 |
|  | Two months | -1.00 | -2.06, 0.06 | .07 |
|  | Four months | -2.59 | -3.75, -1.43 | *<.001\** |
|  | Six months | -1.91 | -3.05, -0.77 | *.001\** |
|  | Twelve months | -1.82 | -2.96, -0.68 | *.002\** |
|  | Hearing Loss | -0.04 | -0.08, 0.01 | .09 |
| Tinnitus Annoyance | One month | -0.15 | -1.18, 0.88 | .78 |
|  | Two months | -0.60 | -1.63, 0.43 | .25 |
|  | Four months | -2.29 | -3.42, -1.16 | *<.001\** |
|  | Six months | -1.53 | -2.64, -0.43 | *.007\** |
|  | Twelve months | -1.63 | -2.73, -0.52 | *.004\** |
|  | Hearing Loss | -0.02 | -0.07, 0.04 | .59 |
| Tinnitus Loudness | One month | 0.18 | -0.74, 1.09 | .71 |
|  | Two months | 0.28 | -0.64, 1.19 | .56 |
|  | Four months | -1.23 | -2.23, -0.22 | *.02\** |
|  | Six months | -0.63 | -1.62, 0.35 | .20 |
|  | Twelve months | -0.91 | -1.90, 0.07 | .07 |
|  | Hearing Loss | -0.05 | -0.10, 0.01 | .11 |
| Relaxation | One month | -0.53 | -1.56, 0.51 | .32 |
|  | Two months | -1.12 | -2.15, -0.09 | *.03\** |
|  | Four months | -1.82 | -2.95, -0.68 | *.002\** |
|  | Six months | -1.26 | -2.38, -0.15 | *.03\** |
|  | Twelve months | -2.39 | -3.50, -1.28 | *< .001\** |
|  | Hearing Loss | 0.04 | -0.02, 0.11 | .18 |
| Concentration | One month | -0.40 | -1.64, 0.85 | .53 |
|  | Two months | -0.97 | -2.21, 0.27 | .13 |
|  | Four months | -1.51 | -2.87, -0.15 | *.03\** |
|  | Six months | -1.25 | -2.59, 0.08 | .07 |
|  | Twelve months | -2.44 | -3.77, -1.11 | *<.001\** |
|  | Hearing Loss | 0.04 | -0.02, 0.10 | .18 |
| Mood | One month | -0.95 | -2.23, 0.33 | .15 |
|  | Two months | -0.51 | -1.79, 0.78 | .44 |
|  | Four months | -1.64 | -3.07, -0.20 | *.03\** |
|  | Six months | -1.15 | -2.53, 0.22 | .10 |
|  | Twelve months | -1.65 | -3.02, -0.27 | *.02\** |
|  | Hearing Loss | 0.08 | 0.02, 0.14 | *.01\** |

Supplementary Table 4. Mixed-effects linear regression results for tinnitus outcome variables. Hearing loss was calculated as the better ear four-frequency pure tone average (PTA). The significant effects are indicated by an asterisk (\*) in the *P*-value column.

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| **Dependent variable** | **Independent variable** | **Coefficient** | **95% CI** | ***P*-value** |
| Change in… | Type of sound (reference: nature) |  |  |  |
| THI | Fractal | 2.55 | -5.09, 10.19 | .51 |
|  | Soundscape | 4.93 | -0.67, 10.52 | .08 |
| TFI | Fractal | -3.73 | -14.97, 7.51 | .52 |
|  | Soundscape | 0.99 | -7.34, 9.32 | .82 |
| Hyperacusis | Fractal | -1.15 | -5.09, 2.79 | .57 |
|  | Soundscape | -0.73 | -4.16, 2.70 | .68 |
| Tinnitus Awareness | Fractal | 0.39 | -1.64, 2.42 | .71 |
|  | Soundscape | -0.49 | -2.25, 1.28 | .59 |
| Tinnitus Annoyance | Fractal | -0.59 | -2.51, 1.34 | .55 |
|  | Soundscape | -1.15 | -2.66, 0.35 | .13 |
| Tinnitus Loudness | Fractal | -0.75 | -2.00, 0.50 | .24 |
|  | Soundscape | 0.01 | -1.28, 1.29 | .99 |
| Relaxation | Fractal | 0.35 | -1.50, 2.20 | .71 |
|  | Soundscape | 0.36 | -1.00, 1.72 | .61 |
| Concentration | Fractal | 0.03 | -2.15, 2.22 | .98 |
|  | Soundscape | 0.93 | -0.74, 2.60 | .27 |
| Mood | Fractal | 0.92 | -1.49, 3.33 | .45 |
|  | Soundscape | 0.88 | -0.99, 2.75 | .36 |

Supplementary Table 5. Mixed-effects linear regression results for the effects of the most used type of sound on tinnitus improvement.