

# **ADVANCED ANALYSIS OF TINNITUS ASSESSMENT DATA**

## **- STSM REPORT**

### **1. Purpose of your mission**

The goal of the present Short Term Scientific Mission was to continue our joint work on the Polish adaptation of the Tinnitus Handicap Inventory (THI) and Tinnitus Functional Index (TFI) as well on the relations between the tinnitus annoyance and tinnitus pitch. We intended to work on two papers with strong methodological-statistical focus.

### **2. Description of the work carried out during a mission**

#### **2.1. THI and TFI questionnaires**

We performed advanced statistical analyses of the tinnitus assessment data collected for the purpose of the Polish adaptation of the THI and TFI questionnaires with the Statistical Package for Social Sciences (v22; SPSS Inc, Chicago, IL). We prepared two papers based on the results obtained.

#### **2.2. Tinnitus pitch – annoyance project**

We discussed the data and work plan, first analysis have been carried out.

### **3. Description of the main results obtained**

For the THI and TFI data analysis we relied mainly on non-parametric techniques, since the majority of our samples were non-Gaussian. We determined the discriminant and convergent validity. Internal consistency reliability was assessed by measuring Cronbach's alpha coefficient and the item-total correlation. The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity were assessed to assure that our data were eligible for factor analysis. Correlations between the factors were calculated, and factor analysis was carried out.

Both – the Polish version of the THI and the Polish version of the TFI questionnaires are satisfactory in terms of construct and criterion validity. They may be used by Polish clinicians working with people who have tinnitus and by Polish scientists working on international scientific research reports.

Final versions of two papers “The Polish adaptation and validation of the Tinnitus Handicap Inventory” and “The Polish adaptation and validation of the Tinnitus Functional Index” have been prepared.

**4. Future collaboration with the host institution (if applicable)**

We will continue our collaboration on the tinnitus pitch – annoyance project.

**5. Foreseen publications/articles resulting from a mission (if applicable)**

Two papers “The Polish adaptation and validation of the Tinnitus Handicap Inventory” and “The Polish adaptation and validation of the Tinnitus Functional Index” have been submitted.

**6. Confirmation by the host institution of the successful execution of your mission**

Please find the confirmation in pdf form sent by email.

**7. And other comments (if any).**

We are truly grateful for the possibility to perform this mission.

**Bibliography**

Wrzosek M., Szymiec E., Klemens W., Kotyło P., Lang-Małecka A., Modrzyńska M., Preis A., Bulla J. (2016). The Polish adaptation and validation of the Tinnitus Handicap Inventory.

Wrzosek M., Szymiec E., Klemens W., Kotyło P., Lang-Małecka A., Modrzyńska M., Preis A., Bulla J. (2016). The Polish adaptation and validation of the Tinnitus Functional Index.