PROMS User's Guide
(updated 29th of November 2021)

1. About the Test

The Profile of Music Perception Skills (PROMS; Law & Zentner, 2012) is a novel musical test battery that measures perceptual musical skills objectively across nine different modalities (melody, pitch, timbre, tuning, rhythm, rhythm-to-melody, accent, tempo, and loudness). For each task, participants are asked to indicate whether stimuli presented are same or different.

Distinctive features

- Objective test-battery for the comprehensive assessment of music perception skills
- First-ever subtests for timbre, tuning, and advanced rhythm discrimination skills
- Suited for online data collection (high stability across-browsers and OS)
- Personalized and illustrated performance feedback

Why choosing the PROMS?

- Suited for assessing musical ability in musicians and non-musicians alike
- Configurable to have selected subtests and various test durations (5 to 60 minutes)
- Culture-fair stimuli make it suitable for cross-cultural comparisons
- Extensive evidence in support of reliability and validity

What's more?

- Researchers manage their own data collection
- Fully computerized administration and scoring
- Direct data export to most common statistical programs
- Available in more than 10 languages

2. Current Versions

All current versions as well as a 3 minute demo showing how the online PROMS works (including the type of feedback that is offered to participants) can be accessed at https://www.uibk.ac.at/psychologie/fachbereiche/pdd/personality_assessment/proms/take-the-test/

- **Full Proms:** The full PROMS is the original test version. It has all 9 test components and takes about 60 minutes to complete.
- **PROMS-S:** This version is a short version of the full PROMS. It includes 8 subtests (Melody, Rhythm, Embedded Rhythm, Tuning, metric Accent, Timbre, Tempo, and Pitch) and takes about 35 minutes to complete.
- **Modular PROMS:** This version allows the test-components of the PROMS to be configured in a customized way.
- **Brief PROMS**: This version includes the test-components 'Melody', 'Metric Accent', 'Tempo', and 'Tuning' and takes about 30 minutes to complete.
- **Mini PROMS:** This version is a short version of the Brief PROMS. It includes the test-components 'Melody', 'Metric Accent', 'Tempo', and 'Tuning' and takes about 15 minutes to complete.
- **Micro-PROMS**: Development in process – a consolidated assessment of musical ability that takes about 10 minutes to complete.

PROMS versions are available in following languages:

Full-PROMS/PROMS-S: Arabic, Chinese, English, French, German, Greek, Indonesian, Japanese, Norwegian, Spanish

Brief-PROMS/Mini-PROMS: Arabic, Chinese, Czech, English, French, German, Greek, Hebrew, Indonesian, Japanese, Norwegian, Portuguese, Spanish, Russian

3. Psychometric Properties

The PROMS has satisfactory psychometric properties for the composite score (internal consistency and test-retest r>.85) and fair to good coefficients for the individual subtests (.56 to.85). Convergent validity was established with the relevant dimensions of Gordon's Advanced Measures of Music Audiation and Musical Aptitude Profile (melody, rhythm, tempo), the Musical Ear Test (rhythm), and sample instrumental sounds (timbre). Criterion validity was evidenced by consistently sizeable and significant relationships between test performance and external musical proficiency indicators in all three studies (.38 to.62, p<.05 to p<.01). An absence of correlations between test scores and a nonmusical auditory discrimination task supports the battery's discriminant validity (−.05, ns). The interrelationships among the various subtests could be accounted for by two higher order factors, sequential and sensory music processing.

For details see:

Zentner, M. & Strauss, H. (2017). Assessing musical ability quickly and objectively: Development and validation of the Short-PROMS and the Mini-PROMS. *Annals of the New York Academy of Sciences*. doi: 10.1111/nyas.13410

Kunert R., Willems R. M., Hagoort, P. (2016). An Independent Psychometric Evaluation of the PROMS Measure of Music Perception Skills. *PLoS ONE 11*(7): e0159103.

Law, L. & Zentner, M. (2012). Assessing musical abilities objectively: Construction and validation of the Profile of Music Perception Skills. *PLoS ONE 7*(12): e52508.

4. Research Project Account

If you would like to use the PROMS battery in your academic research project, we can set up a researcher account for you. This will enable you to use the battery to collect your own data.

How it works

- You will receive a unique URL that provides access to your own research account
- You optionally can add further questions or questionnaires that are of interest to you to create one coherent test battery
- Data is securely stored on servers of the University of Innsbruck IT Department
- Data collected is yours only, and can be downloaded at any time as a csv or SPSS file

Please note that the PROMS is an online test and thus an internet connection is required to administer the test. Please contact us via mail if you want to administer the PROMS offline.

5. Data Management and Export

To access the data of your research, hover over the 'Responses' symbol and choose "Responses & statistics". Choose 'Display responses' to view responses.

To export data to Excel or any other spreadsheet software, choose 'Export results to application', then choose 'Abbreviated question text' as well as 'CSV file' and click 'Export data' (ignore the other options).

To export data to SPSS, choose 'Export results to a SPSS/PASW command file'. Download both files. Open the SPSS syntax file and change the /FILE path to point to the data file (e.g. /FILE='C:/users/docs/survey1234_SPSS_data_file.dat'). Click Run > All. You should have your data now.

6. Scoring

'DS' means 'definitely same', 'DD' means 'definitely different', 'PS' means 'probably same', 'PD' means 'probably different', and 'NO' means 'I don't know'.

Correct answers are coded as '1' with 2 points, correct but uncertain answers ('PP' or 'PS') are coded as P with 1 point. All remaining answers that are not correct are coded as stated above ('DS', 'PS', 'NO', 'PD', or 'DD').

Scores are automatically computed by LimeSurvey and included in the exported data file. Variables containing scores are labelled as followed: PROMSMELODYSCORE (Melody), PROMSRHYTHMSCORE (Rhythm), PROMSRMSCORE (Embedded Rhythm), PROMSTUNINGSCORE (Tuning), PROMSBEATSCORE (Metric Accent), PROMSTIMBRESCORE (Timbre), PROMSSPEEDSCORE (Tempo), PROMSPITCHSCORE (Pitch), PROMSTOTALSCORE (total score)

To manually compute the subscale scores, take the sum of all items within the scale and divide it by 2. For the total scale just add the subscale scores. If you work with IBM SPSS or R, we can send you a syntax/script to automatically compute scores for data analysis.