4-2017

A Short Note on Pitch, Interval, and Melody Matching Assessment

Eric Hanson
Southern Virginia University, eric.hanson@svu.edu

Hannah Baslee
College of Southern Maryland, hannahbaslee@gmail.com

Eric Freudenthal
University of Texas at El Paso, efreudenthal@utep.edu

Follow this and additional works at: http://digitalcommons.utep.edu/cs_techrep

Part of the Computer Sciences Commons, and the Music Theory Commons

Comments:
Technical Report: UTEP-CS-17-30

Recommended Citation
Hanson, Eric; Baslee, Hannah; and Freudenthal, Eric, "A Short Note on Pitch, Interval, and Melody Matching Assessment" (2017). Departmental Technical Reports (CS). 1137.
http://digitalcommons.utep.edu/cs_techrep/1137

This Article is brought to you for free and open access by the Department of Computer Science at DigitalCommons@UTEP. It has been accepted for inclusion in Departmental Technical Reports (CS) by an authorized administrator of DigitalCommons@UTEP. For more information, please contact lweber@utep.edu.
A Short Note on
Pitch, Interval, and Melody Matching Assessment

Authors:
Eric Hanson, D.M.A. - Southern Virginia University, eric.hanson@svu.edu
Hannah Baslee, M.M. - College of Southern Maryland, hannahbaslee@gmail.com
Eric Freudenthal, Ph.D. - University of Texas at El Paso efreudenthal@utep.edu

This short note describes a metric and procedure for assessing an individual's overall simple pitch and interval matching proficiency when singing.

In each exercise, the test subject first listens to and then attempts to duplicate a sample reference pitch, musical interval, or melody as a sung utterance. Accuracy should be computed as fraction of utterances that correctly match the reference interval or pitch.

Exercise 1: Single pitches

Play each of the following pitches clearly one time, giving the individual sufficient time following each note to sing the pitch back on “la”. Mark inaccurate pitches with an “x” (away from the view of the individual). The exercise below is suitable for most children & post-pubescent females. Play an octave lower for post-pubescent males.

Exercise 2: Intervals

Play each of the following intervals clearly one time, giving the individual sufficient time following each to sing the pitches back on “la-la”. Mark inaccurate pitches with an “x”. The individual must repeat both pitches back correctly to receive the check mark. Note: for those intervals marked with “x”, add an “i” notation if the interval was correct (even though the pitches were wrong). The exercise below is suitable for most children & post-pubescent females. Play an octave lower for post-pubescent males.
**Exercise 3:**

Play the following melodies twice on the piano, then allow the student to sing back the entire melody on “la”. Play down the octave for post-pubescent males. Mark each inaccurate pitch with an “x”. In successive assessments randomly vary the melody order and keys (staying within C4-C5 in children & post-pubescent females, and C3-C4 with post-pubescent males).

**Melody 1**

![Melody 1](image1)

**Melody 2**

![Melody 2](image2)

**Melody 3**

![Melody 3](image3)

**Melody 4**

![Melody 4](image4)
Exercise 4: Songs from popular culture.

Play two of the songs below (one at a time), then have the individual repeat (one at a time). Mark each inaccurate pitch an “x”. In subsequent assessments choose two different melodies at random.

Song 1: Happy Birthday

Happy Birthday

My Country, ’tis of Thee

My Country, ’tis of Thee
Song 3: Twinkle, Twinkle, Little Star

Twinkle, Twinkle, Little Star

Twinkle, twinkle, little star, how I wonder what you are! Up above the world so high, like a diamond in the sky. Twinkle, twinkle, little star, how I wonder what you are!

Song 4: Mary Had a Little Lamb

Mary Had a Little Lamb

Mary had a little lamb, little lamb, little lamb. Mary had a little lamb whose fleece was white as snow.

Song 5: Amazing Grace

Amazing Grace

Amazing grace how sweet the sound that saved a wretch like me. I once was lost but now am found, was blind but now I see.

Assessment Administration Form:
Name:  
Gender: M / F  
Age:  
Date: 

**Total Percentage:**

**Ex. 1** (9 pitches)  
\[ ... \]

**Ex. 2** (check for each interval, not individual pitch - 9 intervals)  
\[ ... \]

**Ex. 3** (check individual pitches)  
**Total Exercise 3 %:**

**Melody 1** (7 pitches)  
\[ ... \]

**Melody 2** (11 pitches)  
\[ ... \]

**Melody 3** (10 pitches)  
\[ ... \]

**Melody 4** (12 pitches)  
\[ ... \]

**Ex. 4**  
**Total Exercise 4 %:**

**Song 1** (25 pitches)  
\[ ... \]

**Song 2** (41 pitches)  
\[ ... \]
Song 3 (42 pitches)

%

Song 4 (26 pitches)

Mary Had a Little Lamb

$	ext{M}a\text{-ry had a little lamb, little lamb, little lamb.}$

$	ext{M}a\text{-ry had a little lamb whose fleece was white as snow.}$

Song 5 (35 pitches)

Amazing Grace

$	ext{A\text{-}ma\text{-zing grace how sweet the sound that saved a wretch like me.}$

$	ext{I once was lost but now am found, was blind but now I see.}$