

Supplemental Materials to

“Learning melodic musical intervals: To block or to interleave?”

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List of Reference Songs (Experiment 1)

No.	Interval Type	Reference Song	Scale Degree of Low Pitch	Scale Degree of High Pitch	Counterbalanced Interval Group
1	Minor 2 nd	Pink Panther	Ti	Do	1
2	Major 2 nd	Happy Birthday to You	Sol	La	2
3	Minor 3 rd	So Long, Farewell (<i>“The Sound of Music”</i>)	Mi	Sol	2
4	Major 3 rd	When the Saints Go Marching In	Do	Mi	1
5	Perfect 4 th	Amazing Grace	Sol	Do	2
6	Tritone	<i>“The Simpsons”</i> Theme Song	Do	Fi	1
7	Perfect 5 th	Twinkle Twinkle Little Star	Do	Sol	1
8	Minor 6 th	We are Young (Chorus)	La	Fa	2
9	Major 6 th	Jingle Bells	Sol	Mi	1
10	Minor 7 th	The Winner Takes It All (ABBA)	Sol	Fa	1
11	Major 7 th	Take On Me (A-ha)	Do	Ti	2
12	Perfect 8 th	Somewhere Over the Rainbow	Do	Do	2

Aural Training Information Sheet: Definitions (Experiments 1 and 2)

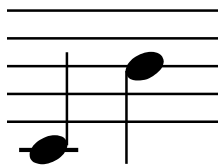
SECTION A: DEFINITIONS

Pitch

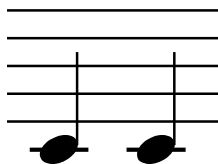
A pitch is the “lowness” or “highness” of a musical note.

Music Interval

A music interval is the difference between any 2 different pitches (i.e., one low and one high). Two musical notes of the same pitch are not considered a music interval.



- ✓ Example of an interval
- Presence of 2 *different* pitches



- ✗ Not an interval
- Presence of 2 *same* pitches

12 Types of Intervals

The name of each interval is based on:

- 1) Distance (i.e., 2nd, 3rd, 4th, 5th, 6th, 7th, 8th)
- 2) Tonal quality (i.e., Major, Minor, Perfect, Tritone)

No.	Interval Name
1	Minor 2 nd
2	Major 2 nd
3	Minor 3 rd
4	Major 3 rd
5	Perfect 4 th
6	Tritone
7	Perfect 5 th
8	Minor 6 th
9	Major 6 th
10	Minor 7 th
11	Major 7 th
12	Perfect 8 th

Aural Training Information Sheet: Reference Songs (Experiment 1)

SECTION B: REFERENCE SONGS

Reference Song

A song referenced by listeners to identify specific intervals. Typically, the first 2 pitches (low pitch and high pitch) of the reference song form a specific interval.

No.	Interval Name	Reference Song	Lyrics	
			Low Pitch	High Pitch
1	Minor 2 nd	Pink Panther	-	-
2	Major 2 nd	Happy Birthday to You	Happy	birth–
3	Minor 3 rd	So Long, Farewell (“ <i>The Sound of Music</i> ”)	So	long
4	Major 3 rd	When the Saints Go Marching In	Oh	when
5	Perfect 4 th	Amazing Grace	A–	–ma
6	Tritone	“ <i>The Simpsons</i> ” Theme Song	The	Simp–
7	Perfect 5 th	Twinkle Twinkle Little Star	Twinkle	twinkle
8	Minor 6 th	We are Young (Chorus)	Fi–	–re
9	Major 6 th	Jingle Bells	Da–	–shing
10	Minor 7 th	The Winner Takes It All (ABBA)	The win–	–ner
11	Major 7 th	Take On Me (A-ha)	Take	on
12	Perfect 8 th	Somewhere Over the Rainbow	Some–	–where

Sample Study Sequences for Two Counterbalanced Versions (Experiment 1)**COUNTERBALANCED VERSION 1**

Learning Strategy	Interval Types Studied
Blocked (B)	Minor 2 nd , Major 3 rd , Tritone, Perfect 5 th , Major 6 th , Minor 7 th
Interleaved (I)	Major 2 nd , Minor 3 rd , Perfect 4 th , Minor 6 th , Major 7 th , Perfect 8 th

Sample Presentation Order

Block Order	Interval Stimuli
B	<ol style="list-style-type: none"> 1. Minor 7th on D\flat 2. Minor 7th on E 3. Minor 7th on F\sharp
I	<ol style="list-style-type: none"> 1. Major 2nd on D\flat 2. Minor 3rd on D\flat 3. Perfect 4th on D\flat 4. Minor 6th on D\flat 5. Major 7th on D\flat 6. Perfect 8th on D\flat
B	<ol style="list-style-type: none"> 1. Perfect 5th on D\flat 2. Perfect 5th on D 3. Perfect 5th on F
B	<ol style="list-style-type: none"> 1. Tritone on C 2. Tritone on D\flat 3. Tritone on F
I	<ol style="list-style-type: none"> 1. Major 2nd on G 2. Minor 3rd on G 3. Perfect 4th on G 4. Minor 6th on G 5. Major 7th on G 6. Perfect 8th on G
B	<ol style="list-style-type: none"> 1. Major 3rd on C

	2. Major 3 rd on E 3. Major 3 rd on F
B	1. Major 6 th on C 2. Major 6 th on E \flat 3. Major 6 th on E
I	1. Major 2 nd on A \flat 2. Minor 3 rd on A \flat 3. Perfect 4 th on A \flat 4. Minor 6 th on A \flat 5. Major 7 th on A \flat 6. Perfect 8 th on A \flat
B	1. Minor 2 nd on D 2. Minor 2 nd on E \flat 3. Minor 2 nd on E

Note. The order of presentation within each block was randomized for each participant.

COUNTERBALANCED VERSION 2

Learning Strategy	Interval Types Studied
Blocked (B)	Major 2 nd , Minor 3 rd , Perfect 4 th , Minor 6 th , Major 7 th , Perfect 8 th
Interleaved (I)	Minor 2 nd , Major 3 rd , Tritone, Perfect 5 th , Major 6 th , Minor 7 th

Sample Presentation Order

Block Order	Interval Stimuli
B	1. Minor 3 rd on A \flat 2. Minor 3 rd on A 3. Minor 3 rd on C
I	1. Minor 2 nd on C 2. Major 3 rd on C 3. Tritone on C 4. Perfect 5 th on C 5. Major 6 th on C

	6. Minor 7 th on C
B	1. Major 7 th on G 2. Major 7 th on A \flat 3. Major 7 th on B \flat
B	1. Perfect 8 th on G 2. Perfect 8 th on A 3. Perfect 8 th on B \flat
I	1. Minor 2 nd on E 2. Major 3 rd on E 3. Tritone on E 4. Perfect 5 th on E 5. Major 6 th on E 6. Minor 7 th on E
B	1. Minor 6 th on A 2. Minor 6 th on B \flat 3. Minor 6 th on B
B	1. Major 2 nd on F 2. Major 2 nd on B \flat 3. Major 2 nd on B
I	1. Minor 2 nd on B \flat 2. Major 3 rd on B \flat 3. Tritone on B \flat 4. Perfect 5 th on B \flat 5. Major 6 th on B \flat 6. Minor 7 th on B \flat
B	1. Perfect 4 th on G 2. Perfect 4 th on A \flat 3. Perfect 4 th on B \flat

Note. The order of presentation within each block was randomized for each participant.

**Means and Standard Deviations of Participants' Scores on the Goldsmiths
Musical Sophistication Index (Gold-MSI)**

		Experiment 1		Experiment 2	
		(<i>N</i> = 44)		(<i>N</i> = 44)	
Gold-MSI Subscale	No. of Items	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Active Musical Engagement	9	30.18	8.30	31.02	8.93
Perceptual Abilities	9	41.57	7.89	41.77	8.73
Musical Training	7	16.93	7.10	15.52	6.73
Emotional Responses to Music	6	28.25	4.45	29.00	4.23
Singing Abilities	7	24.64	7.60	26.05	9.03
General Musical Sophistication	18	59.59	16.24	61.16	18.59

Note. All ratings were performed on a 7-point scale.