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The Index of Phonetic Complexity: At-a-Glance Scoring System, Terminology, Instructions, & Data Forms

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Index of Phonetic Complexity: Scoring System

Indices	Points Assigned for:	No Points for:	One Point for Each:
1	consonants by place class	labials coronals glottals	dorsal
2	consonants by manner class	stops nasals glides	fricative affricate liquid
3	vowels by class	monophthongs diphthongs	rhotic
4	word shape	words that end with a vowel	word that ends with a consonant
5	word length in syllables	monosyllabic or disyllabic words	three- (or more) syllable word
6	singleton consonants by place variegation	words with place reduplicated singletons	time consecutive singleton consonants vary by place
7	contiguous consonants	no clusters	consonant cluster
8	cluster by type	homorganic clusters	heterorganic cluster

Terminology

Consonants: Place Classifications

labials: p b m w f v

coronals: θ ð t d r n s z j ʃ ʒ ʧ ʤ ɹ ɻ

dorsals: k g ŋ

glottals: ʔ h

Consonants: Manner Classifications

stops: p b t d r k g ʔ

fricatives: f v θ ð s z ʃ ʒ h

nasals: m n ŋ

affricates: ʧ ʤ

glides: w j

liquids: l ɹ

Vowels: Manner Classifications

monophthongs: i ɪ e ε æ ə u ʊ o ɔ ɑ

(phonemic) diphthongs: aɪ aʊ ɔɪ

rhotics: ɚ ɪə ɛə uə ɔə ɑə aɪə aʊə

Terminology

Word Shape Designations

Word ending with a consonant = closed

Word ending with a vowel = open

Syllable Designations

- Every vowel denotes a separate syllable
- A vowel = a syllable (consonants are optional)

Singleton Consonant Variegation

If place varies when moving from one single consonant to the next singleton, then considered “variegated;” each variegation = 1 point

Contiguous Consonants

- Contiguous consonants = “a consonant cluster”
- A cluster is “heterorganic” when place differs among its segments

Steps for Calculating Articulatory Complexity Using the IPC

1. Place

Each dorsal (D) gets 1 point.

2. Manner

Each *fricative*, *affricate*, and *liquid* (FAL) gets 1 point.

3. Vowels

Each *rhotic* (R) gets 1 point.

4. Word Shape

If the word ends with a consonant (FC), then it gets 1 point.

5. Word Length in Syllables

Words with three or more syllables (3+) get 1 point.

Steps for Calculating Articulatory Complexity Using the IPC

6. Singleton Place Variagation

If a word has singleton consonants that are *place variegated* (SPV), then the word gets 1 point each time place is varied from singleton consonant to singleton consonant.

7. Contiguous Consonants

Each *consonant cluster* (CC) gets 1 point, no matter how many consonants comprise the cluster.

8. Cluster Type

Each cluster that is comprised of segments that vary in place (CCV) gets 1 point for being *heterorganic*.

Target - Index of Phonetic Complexity: T-IPC Data Form

Identifying Information

Participant: _____

Age: _____

Sex: _____

Date: _____

Examiner: _____

Notes: _____



Target - Index of Phonetic Complexity: T-IPC Data Form

Results

Total # Targets: _____

T-IPC Value Range: _____

Mean T-IPC Value: _____

Standard Deviation: _____

Notes: _____



**Targets
Phonetically
Transcribed**

**1
D**

**2
FAL**

**3
R**

Indices

**4
FC**

**5
3+**

**6
SPV**

**7
CC**

**8
CCV**

**Total
T-IPC
Values**

	1 D	2 FAL	3 R	4 FC	5 3+	6 SPV	7 CC	8 CCV	Total T-IPC Values



Production - Index of Phonetic Complexity: P-IPC Data Form

Identifying Information

Participant: _____

Age: _____

Sex: _____

Date: _____

Examiner: _____

Notes: _____



Production - Index of Phonetic Complexity: P-IPC Data Form

Results

Total # Targets: _____

P-IPC Value Range: _____

Mean P-IPC Value: _____

Standard Deviation: _____

Notes: _____



**Productions
Phonetically
Transcribed****Indices****Total
P-IPC
Values****1
D****2
FAL****3
R****4
FC****5
3+****6
SPV****7
CC****8
CCV**

	1 D	2 FAL	3 R	4 FC	5 3+	6 SPV	7 CC	8 CCV	Total P-IPC Values

