**Supplemental File 2:** Major mismatch patterns for obstruents concerning consonants with [+s.g.].

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|   | **Age** | **[+sg] > [-sg] mismatch** |  |  | **[+sg] match: other mismatches** |
|   | (yr) | C Deletion | [-sg][-vd] | [+vd] | [+vd] | Manner only | Major Place | Manner & Place |
|  |  |  | Stop gem. | Unasp. stop | only | & othera | Asp. stopc | e.g. f > s; kh > th |  |h| > fric | C > [h] | [l̥] [ɹ̥] | Asp. stop (placeX) |
| /h/ | 2 | 0,88% | - | - | - | - | - | - | 0.44%b |   | - | - |
| Word-initial | 3 | 0,25% | - | - | - | - | - | - | - |   | - | 0.13%b |
|  | 4 | - | - | - | - | - | - | - | - |   | - | 0.13%b |
| Post-aspirated | 2 | - | - | **23.0%** | - | - | - | 9.0% |   | - | - | - |
|  stops | 3 | - | - | **9.3%** | - | - | - | 3.8% |   | - | - | - |
| Word-initial | 4 | - | - | 1.4% | - | - | - | 4.5% |   | - | - | - |
|  | 5 | - | - | 0.6% | - | - | - | 1.5% |   | - | - | - |
|  | 6 | - | - | 0.2% | - | - | - | - |   | - | - | - |
| Pre-aspirated | 2 | - | 5.6% | 0.43%c | - | - | - | 4.7% |   | - | - | - |
|  stops | 3 | - | 2.6% | 0.6%c | - | - | - | 2.2% |   | - | - | - |
| Word-medial, | 4 | - | 0.7% | 0.26%c | - | - | - | 0.1% |   | - | - | - |
|  word-final | 5 | - | 0.8% | - | - | - | - | 0.2% |   | - | - | - |
|  | 6 | - | 0.9% | - | - | - | - | - |   | - | - | - |
| Fricativesc | 2 | - | - | 1.3% | 0.4% | 1.4% | 1.5%d | **11.2%** |  | 4.6% | - | 1.1% |
| Word-initial | 3 | - | - | 0.6% | 0.1% | 1.7% | 0.3%d | 5.8% |   | 3.5%d | 0.7% | 0.01% |
|  | 4 | - | - | 0.1% | 0.1% | - | 0.3%d | 2.3% |   | 0.3% | - | - |
|  | 5 | - | - | - | - | - | - | 1.5% |   | 0.1%c | - | - |
|  | 6 | - | - | - | - | - | 0.1%c | 0.3% |   | - | - | - |
|  | 7 | - | - | - | - | - | - | 0.2% |   | - | - | - |
| Fricativesc | 2 | - | - | 2.9% | - | - | - | 0.4% |   | - | - | 0.4% |
| Word-medial | 3 | - | - | 0.6% | 1.0% | 0.2% | 0,1% | - |   | 0.1% | - | 0.1% |
|  | 4 | - | - | - | - | - | - | - |   | - | - | - |
|  | 5 | 0.3% | - | - | - | - | - | 0.2% |   | - | - | - |
| Fricativesc | 2 | **8.8%** | - | 0.3% | - |   | 3.2% | 4.2% |   | 0.6% | 1.4% | 0.3% |
| Word-final | 3 | 3.0% | - | 0.5% | - | 0.6% | 1.3% | 2.4% |   | 0.4% | 0.9% | - |
|  | 4 | 2.0% | - | 0.2% | - | - | 0.7% | 1.7% |   | - | - | - |
|  | 5 | 0.5% | - | 0.2% | - | - | 0.4% | 1.2% |   | 0.7%c | - | - |
|  | 6 | - | - | 0.4% | - | - | - | 0.4% |   |  |  |  |
|  | 7 | - | - | - | - | - | 0.2% | 0.2% |   |   | - | - |

Note. Data are reported where one age group showed 5+% mismatches for any target. Gem. = gemination; asp = aspirated; fric = fricative; [vd] = [voiced].

a [-sg] [+voiced] mismatch plus place or manner mismatch and/or cluster creation.

b For |h|, 'manner & place' mismatches included one [f] at age 2 and [th] and [kh] once at ages 3 and 4.

c *epli* |ɛhplɪ| > [ɛplɪ] (Age 2: 1/37 tokens; age 3: 4/114; age 4; 2/107). One 3-year-old pronounced *jakki* |jahcɪ| as [ja:cɪ].

d Aspirated stop substitutions both matched for place (Manner only) and mismatched for place (Manner & Place).