Table 4: Stability of synthetic datasets across ASHA domains.

| Domain | Study | Sample Size | P-valuea | Effect Size Measure | Effect Size | P-value Agreement | Effect Size Categorization Agreement |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Swallowing | Curtis et al. (2023) | 584 | <.001 | √(3/𝜋) x odds ratio (mu) | .06 | 100% (zero-inflated) & 98% (beta) | 100% (zero-inflated) & 100% (beta) |
| Articulation | Thompson et al. (2023) | 40 | <.001 | Cohen’s f | .59 | 71% | 57% |
| Fluency | Elsherif et al. (2021) | 114 | <.001 | Glass' Δ | -2.18 | 100% | 100% |
| Voice and resonance | Novotný et al. (2016) | 111 | <.001 | Correlation coefficient | .51 | 99% | 40% |
| Hearing | Battal et al. (2019) | 372 | .016 | √(3/𝜋) x odds ratio | 1.56 | 78% | 100% |
| Communication modalities | King et al. (2022) | 2,160 | <.001 | Cohen's 𝜔 | 34.6 | 100% | 100% |
| Receptive and expressive language | Kearney et al. (2023) | 36 | <.001 | Correlation coefficient | .59 | 100% | 90% |
| Cognitive aspects of communication | Clough et al. (2023) | 8,568 | .013 | √(3/𝜋) x odds ratio | 1.53 | 35% | 99% |
| Social aspects of communication | Chanchaochai & Schwarz (2023) | 96 | <.001 | Cohen’s d | -.85 | 97% | 66% |
| aCaption: 100 synthetic datasets were generated for each domain. For the Swallowing domain, a zero-inflated beta multilevel model was performed to directly compare original and synthetic datasets. The percentage of non-significant p-values, which is indicative of no statistically significant difference between dataset types, is shown for both zero-inflated and beta portions of the model. | | | | | | | |