Disfluencies In Normal Hindi Speaking Children - 5-7 years

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The speech features involved in an assessment of fluency have been subsumed under a general concept of 'transition smoothness' (Dalton and Hardcastle, 1977). These features include: "Pausing (that is discontinuities of gaps in the speech audio signal due for example, to articulatory closures" hesitations and juncture pauses), rhythmical patterning (the regular succession of stressed beats in a speech utterance), regulation of tempo, intonation and stress patterns, and other features including interjections, interruptions etc., which cannot be easily included under the other categories (Dalton and Hardcastle, 1977). They add that these features could effect normal speech in various ways.

The present study was conducted to explore the speech fluency of Hindi speaking normal children.

Twelve normal Hindi speaking children (two each in two month interval) from middle-socio-economic status were considered for the study. Speech was elicited by story telling. Six common stories were selected from the Panchatantra and pictures (ranging from 5-15) were drawn. Pictures for a given story were visually presented to the subject one at a time and responses were audio recorded and were transcribed and analysed.

Two types of analysis were done. In type I analysis: an instance of disfluency was defined as a disfluency occurring once and this was measured as one disfluency. In type II analysis: an instance of disfluency was measured as a disfluency occurring once irrespective of the number of disfluency in each instance. The number of words uttered, percentage of disfluencies, and percentages of different types of disfluencies, for position, age and grammatical categories were calculated. Eight categories of disfluencies, <u>Filled pauses. Unfilled pauses. Repeats Parenthetical Remarks. False starts Prolongations-Clusters, and Audible inspiration</u> three positions; initial, medial, final; and the grammatical categories; noun, pronoun, verb, adverb, adjective, preposition, interjection and conjunction were considered.

The results revealed that female subjects uttered more number of words than the male subjects. The overall percentage of disfluency was less of females than for males - 35.15% for males and 26.89% for females. In all the subjects atleast 85% of the disfluencies occurred in the initial position followed by final and medial position. Disfluencies in the medial position were minimal. Unfilled pause, parenthetical remarks and audible inspiration occurred most frequently and false starts, prolongation and clusters occurred least. In repetition WR and SYR were the most frequently occurring where as PWR, PhR and SR occurred least.

Disfluencies occurring ' before-on-after' grammatical categories were also analysed. Most of the disfluencies occurred 'before' the grammatical categories followed by 'after' and 'on' grammatical categories. Most of the disfluencies occurred, 'before-on-after' the content words (nouns, pronouns, and verbs) and conjunctions, and minimal 'before-on-after' other grammatical categories

viz adverbs adjectives, prepositions and interjections. Most of the clusters consists of AI and UFP and most of the AI occurred initial position.

A comparison of the results of the this study has been made with four other studies in Kannada speaking normal children (Nagapoornima, 1990; Indu, 1990; Yamini, 1990; and Rajendraswamy, 1991) in the age range 3-4 years; 4-5 years; 5-6 years; and 6-7 years respectively. The comparison revealed that, the filled pauses showed an increase from 3-5 years and then declined. UFP declined from 3-5 years and increased beyond this. Repetition also showed an increase from 5 to 7 years. PR and FS showed increase in 3-6 years and then declined in 6-7 years. Prolongation and audible inspiration were not seen in 3-4 years, but it increased from 4-7 years.

Comparison between types of analysis were also made. It was observed that in type II analysis only FP, PR and R were affected. It was noticed that there was a marked reduction in the overall percentage of disfluencies. But this reduction in the percentage of disfluencies was not as low as 5% which was given by Hegde (1990). Thus the type of analysis has a minimal effect on the overall percentage of disfluency in Hindi language.

On the basis of findings of this study scores and ranges in a story telling task has been proposed for the age range 6-7 years, and the purpose of this is to help the clinicians in identifying dysfluency in children and further to aid in an early management.