

**LANGUAGE IN INDIA**  
**Strength for Today and Bright Hope for Tomorrow**  
**Volume 11 : 1 January 2011**  
**ISSN 1930-2940**

Managing Editor: M. S. Thirumalai, Ph.D.  
Editors: B. Mallikarjun, Ph.D.  
Sam Mohanlal, Ph.D.  
B. A. Sharada, Ph.D.  
A. R. Fatihi, Ph.D.  
Lakhan Gusain, Ph.D.  
K. Karunakaran, Ph.D.  
Jennifer Marie Bayer, Ph.D.  
S. M. Ravichandran, Ph.D.  
G. Baskaran, Ph.D.

**Rate of Speech in Punjabi Speakers**

**Deepti Kaushal, B.Sc.**  
**Anuradha Sharma, M.Sc.**  
**Sanjay Munjal, Ph.D.**  
**Naresh Panda, Ph.D.**

---

**Abstract**

Rate of an individual's speech may affect coordination of respiration and phonation, muscular tension in the vocal tract, and intelligibility. The value of assessing rate of speech is that it allows one to evaluate its effects on the client's communicative abilities.

The aim of the present study was to find out of the rate of speech of native Punjabi speakers. 20 subjects (10 males and 10 females) in the age range of 18-40 years were taken for the study. It was tested whether the rate of speech differs in different tasks, viz., reading and picture description. The results obtained show that the rate of speech in reading is higher than picture description for both males and females. Rate of speech of male speakers does not differ from female speakers.

**Key Words:** Speaking Rate, Reading Rate, Syllable, Punjabi

**Abbreviations**

1. N.S. - Not significant
2. SPM - Syllables per minute
3. SPS -Syllables per second
4. WPM – Words per minute
5. WPS – Words per second

## **Introduction**

Individuals relate their experiences, ideas, knowledge, and feelings to one another through various processes of communication. Communication includes speech, sign language, gestures and writing. Speech is the audible manifestation of language. It has two main elements, namely, linguistic knowledge (vocabulary, syntactic, semantic aspects, etc.), pragmatic and prosodic features. Prosodic elements refer to stress-rate, rhythm and intonation.

Speaking rate is the number of syllables or words produced over a given period of time. It has been measured as words or syllables spoken or read per minute, (Ryan 1974; and Ingham 1984)

Rate of speech affects both fluency and intelligibility. Rate varies with number of linguistic events like length of utterances, differences in physiological capacities, ways of speaking, frequency and duration of hesitations and pauses, functioning of central and peripheral mechanisms.

Rate of speech does not have a fixed value. It is generally expressed in range. Normal speaking rate in English language has a range of 115 to 165 words per minute and 162 to 230 syllables per minute (Andrews and Ingham 1971), whereas normal reading rate has a range of 150 to 190 words per minute and 210 to 265 syllables per minute (Darley and Spriesterbach 1978).

Studies have been carried out with respect to rate of speech and the normative values in various Indian languages such as Marathi, Kannada and Oriya. One cannot blindly use the norms of one language for another language in view of the differences in the social environment and the probable difference in the neuromuscular skills.

To the best of knowledge available to the authors, no studies have been carried to measure the rate of speech for Punjabi speaking population except in a cross-linguistic study (Rathna and Bhardwaja 1977). Hence, present study was conducted to establish normative data for the rate of speech of Punjabi speakers

## **Review of Literature**

Rate of speech is defined as the number of output units (that is, syllables or words) per unit time, and then expressed as words per second or syllables per second or word per minute or syllables per minute (Tsao and Weismer 1997).

Rate of speech is dependent on the duration of speech sounds, the number of the pauses and the amount of time spent in pausing. Rate varies from individual to individual. Various factors contributing to variation in rate of speech could be grouped as Material-dependent, Listener-dependent and Speaker-dependent factors.

## **Speaker-dependent Factors and Rate of Speech**

Various speaker-dependent factors include aspects such as neuromuscular capacity, linguistic competence, and emotional state of the speaker. Emotion has an important role in the change of rate of speech (Steer 1976).

### **Language of Speaker and Rate of Speech**

Many studies have been done in Indian languages to investigate the relationship between language spoken and rate of speech.

Poornima, Purushottama and Venkatesh (1982) conducted a study on 32 males and 32 females who were native speakers of Kannada. Results indicated that there was no significant difference between males (Mean 281.26 and S.D. 41.84) and females (Mean 282.91 and S.D. 31.64) in reading or spontaneous speech.

Rathna and Bharadwaja (1977) conducted a cross-linguistic study for the languages Hindi, Punjabi, Kannada, Tamil and Marathi. The following results were presented in this report:

In Marathi, Hindi, Punjabi, Kannada and Tamil languages, the rate of speech in WPM in reading tasks were 131, 198, 163, 93, and 127.33 respectively.

In terms of SPM, rate of speech in above languages were 355, 440.33, 334.67, 429.67, 503.67 respectively.

Rate of speech in spontaneous speech tasks in terms of WPM was slower than rate of speech in reading tasks in all above mentioned languages except Kannada language where rate in spontaneous task (111.3 WPM) was faster than reading task (93 WPM).

The respective values in spontaneous speech task in terms of WPM in above languages were 123.33, 153.67, 149, 111.33, and 116.33. Similarly, rate of speech in terms of SPM in spontaneous speech task has the following values: Marathi – 345SPM, Hindi – 275.33SPM, Punjabi – 317.67SPM, Kannada – 422.67SPM, Tamil – 448.33SPM.

Banik and Sashidhar (1989), carried out a study to provide information about the rate of speech for normal speech in Oriya language. They found a significant difference between the rate of speech of literates and illiterates but not between males and females. They also observed a decline in rate of speech, after the middle age in both literate and illiterate groups for both sexes.

Jawadekar (1999) carried out a study on rate of speech for normal speaking individual in Marathi. The author reported that the rate of speech increases from the age of 7 to 16 years after which there is plateau or a decline in the rate up to the geriatric age group. There was no significant difference observed between rate of speech of males and females in any age group for any task.

### **Methodology**

## SUBJECT SELECTION

20 native Punjabi speakers in age range of 18 years to 40 years participated in the present study. Hearing and vision was apparently normal as informally screened by the experimenter.

## INSTRUMENTATION

The utterances of each subject were recorded using a high quality audio tape recorder equipped with an external microphone in a relatively quiet room. A distance of approximately 2 inches was kept between the microphone and the mouth of the subject. A stopwatch was used to measure the time taken to complete the task.

### **Material and Method for Elicitation of Speech Reading and Spontaneous Speech**

A passage from 10<sup>th</sup> standard Punjabi textbook was selected and was given to subjects without any prior familiarization (Appendix). Elicitation of speech sample for the story-telling task was done by narrating the story to each subject (Figures).

### **Measures and Analysis**

Two experienced Speech therapists served as judges. They were explained the terminologies utilized and process of analysis or calculations required. They were familiarized with the task using 2 samples that were not utilized in statistical analysis. Judges were instructed to calculate total time taken for a given sample with the help of a stopwatch.

All the samples were then transcribed in the form of syllabic structure. Any pauses greater than 3 seconds were not included in the analysis. It was assumed that a person took time in retrieving words. The number of words and syllables per second/per minute were counted.

### **Results and Discussion**

1. When rate of speech in reading task was compared with picture description task for male subjects, the mean values were 159.456WPM and 135.818WPM respectively. Similarly, in terms of SPM, values for the two tasks were 253.893 and 206.694 respectively (table 1). Both findings suggests statistically significant ( $p < 0.05$ ) difference between rate of speech for both tasks.
2. In table 2, comparison was made between the rate of speech in reading and picture description task for male subjects. As can be seen in table 2, the mean rates of speech (WPS) for the two tasks were 2.654 and 2.255 respectively. These differences were found to be statistically significant ( $p < 0.05$ ). Similarly, the rate of speech in SPS for two tasks was 4.226 and 3.433 respectively. Again, findings suggest statistically significant difference between rates of speech for two tasks.
3. Table 3 shows the comparison between rate of speech in reading and picture description tasks for female subjects. Results obtained (WPM) for two tasks were 159.345 and 140.08 respectively. These findings were statistically significant as  $p < 0.05$  (table 3). Similarly, rate of speech (SPM) for the above two tasks were 253.726 and 206.998 respectively. Statistically significant difference

( $p < 0.05$ ) between rate of speech for two tasks was found, i.e., rate of speech in reading task was faster than rate in picture description task.

4. Rate of speech (WPS) for reading and picture description tasks within female group were 2.652 and 2.331 respectively. In terms of SPS, values for the above two tasks were 4.227 and 3.444 respectively. As shown in table 4, these findings suggest statistical difference ( $p < 0.05$ ) between rate of speech for reading and picture description tasks.

Jawadekar (1999) compared the rate of reading and picture description tasks and narration in Marathi language in terms of WPS and SPS. In SPS, reading rate was higher than other two tasks. This was in accordance with present study. But in Jawadekar's findings, rate of reading in WPS was lower than other two tasks. This could be due to reading material containing more polysyllabic words. Rathna and Bhardwaj (1977) studied rate of speech in Hindi, Punjabi, Kannada, Tamil and Marathi languages. In terms of WPS and SPS, both the studies were in accordance with present study, i.e. rate in reading was higher than spontaneous speech.

5. In table 5, rate of speech for males and females in reading task was compared. Rate of speech (WPM) for the above two groups were 159.456 and 159.345 respectively. Similarly, rate of speech (SPM) for the two groups were 253.893 and 253.726 respectively. Both the findings reveal no statistically significant difference ( $p > 0.05$ ) between rate of speech for males and females in reading task.

6. In table 6, rate of speech for males and females in reading task was compared. Rate of speech (WPS) for the above two groups were 2.654 and 2.652 respectively. Similarly, rate of speech (SPS) for the two groups were 4.222 and 4.227 respectively. Both the findings reveal no statistically significant difference ( $p > 0.05$ ) between rate of speech for males and females in reading task.

7. Again, rate of speech in picture description task for both male and female group was compared. Mean values (WPM) obtained for males and females were 135.82 and 140.08 respectively. Similarly, in terms of SPM, values for the two groups were 206.69 and 206.99 respectively. From the results shown in table 7, it can be observed that no statistically significant difference ( $p > 0.05$ ) between rate of speech for males and females in picture description task was found.

8. In table 8, rate of speech for males and females in picture description task was compared. Rate of speech (WPS) for the above two groups were 2.255 and 2.331 respectively. Similarly, rate of speech (SPS) for the two groups were 3.433 and 3.444 respectively. Both the findings reveal no statistically significant difference ( $p > 0.05$ ) between rate of speech for males and females in picture description task.

Banik and Sashidhar (1989) compared the spontaneous speech rate of Oriya speakers between males and females and observed no significant difference. Similarly Venkatesh, Purushottam and Poornima (1982) compared rate of spontaneous speech among native Kannada male and female speakers and found significant difference. This was in concordance with present study.

When present study on Punjabi speakers was compared with the cross-linguistic study done by Rathna and Bhardwaj (1977), it was found that in reading and picture description tasks, in terms

of WPM, Marathi, Kannada, and Tamil languages are slower than Punjabi language. In terms of SPM, Marathi, Kannada and Tamil languages are faster than Punjabi language. This could be due to polysyllabic words spoken by speakers of other languages. Study also concluded that Hindi language, both in reading and picture description tasks, is faster than Punjabi language.

For speech language pathologists, studying rate of speech is very important because in many speech and language disorders, and in some of the motor speech disorders, rate of speech deviates from that of normal in either direction. These include stuttering, neurogenic language disorders and some of the motor speech disorders (dysarthria).

### **Summary and Conclusions**

Present study is an attempt to find the rate of Punjabi speakers for the age group 18 to 40 years for both sexes. In the present study, 20 subjects, 10 males and 10 females were selected. The subjects were required to read from a passage and were also given a set of pictures for picture description. Time was measured using a stopwatch and transcription method was employed to count the number of words and syllables spoken. For each task of a particular speaker, the rates were found out in terms of WPM/SPM, WPS/SPS.

Following results have been obtained:

1. There is a significant difference between reading and picture description tasks for males and females separately.
2. No significant differences have been observed between rate of speech in males and females (sex comparison).

### **Limitations**

1. Small sample size, which hinders the generalization to larger population.
2. Only one age group, i.e., 18 to 40 years was taken for study.

=====

### **References**

Allen, G. (1973). Segmental timing control in speech production. *Journal of Phonetics*, 1, 219-237. As cited in Tsao, Y-C., and Weismer, G., (1997), Interspeaker variation in habitual speaking rate; Evidence for a Neuromuscular Component. *Journal of Speech, Language and Hearing Research*. 40, 858-866.

Andrew, G., and Ingham, R. (1971) Stuttering: Considerations in the evaluation of treatment. *British Journal of Communication Disorders*, 6, 129-138. As cited in Assessment and diagnosis, (Eds), Peters, T.J., and Guitar, B., (1991), Stuttering; An integrated approach to its nature and treatment. (141) Williams and Wilkins, Baltimore.



Banik, A; and Sashidhar, K.N. (1988-89). The rate of speech in Oriya. The Journal of Indian Speech and Hearing Research Association,8,5-6.

Darley and Spriesterback, D. (1978) Diagnostic Methods in Speech Pathology (2<sup>nd</sup> Ed). New York. Harper and Row. As cited in Peter, T.J. and Guitar, B., (1991), stuttering: An integrated approach to its nature and treatment, Williams and Wilkins Baltimore.

Gordon, P.G. (1989).Context Effect in recognizing syllable final /z/ and /s/ in different phrasal portions. Journal of the Acoustical Society Of America, 86, 1698-1707.As cited in Tsao, Y-C;and Weismer, G.(1997), Interspeaker variation in habitual speaking rate: Evidence for a Neuromuscular component, Journal of Speech and Hearing Research, 40, 858-866.

Jawadekar S. (1999) Effect of Age, Sex and Task on the rate of speech of normal Marathi speakers, Unpublished M.Sc. Dissertation, University of Mumbai.

Liberman, P., Katz, W., Jongman, A., Zimmermann, R., and Millar. M. (1985). Measures of the sentence intonation of read and spontaneous speech in American English. Journal of the Acoustical Society of America, 77, 649-659. As cited from Tsao, Y.C., and Weismer, G. (1997). Interspeaker variation in habitual speaking rate: Evidence for neuromuscular component. Journal of Speech and Hearing Research, 40, 858-866.

Mackay, D.G. (1974), Aspects of the Syntax of behaviour: Syllable structure and speech rate. Journal of experimental Psychology, 26, (4), 642-657.

Morrison, M., and Rammage, L. (1994). The management of voice disorders, 15, Chapman and Hall Publications.

Rathna, N., and Bhardwaja, A., 1977, Rate of speech in different Indian languages, The Journal of All India Institute of Speech and Hearing 8, 57-60.

Ryan, B. (1974). 'Programmed stuttering, therapy for children and adults, Springfield, IL: C.C. Thomas.

Sorenson,J.M., Cooper, W.E.,and Paccia, J.M.(1978).Speech timing of grammatical categories. Cognition, 6,135-153.As cited from Tsao,Y.C., and Weismer,G.(1997). Interspeaker variation in habitual speaking rate. Evidence for a neuromuscular component. Journal of Speech and Hearing Research, 40,858-866.

Tsao, Y.C. and Weismer, G. (1979). Interspeaker variation in habitual speaking rate. Evidence for a neuromuscular component. Journal of speech, language and hearing research. 40, 858-866.

Turner, G., and Weismer, G. (1993).Characteristics of speaking rate in the dysarthria associated with amyotrophic and Hearing Research, 36, 1134-1144. Cited in Tsao, Y.C. Weismer, G. (1997), Interspeaker Variation in Habitual

Speaking Rate: Evidence for a neuromuscular component, Journal of speech language and hearing research, 40, 858-866.

Venkatesh, C., Purushottama, G., and Poornima, M. (1983), Normal rate of speech in Kannada, The Journal of All India Institute of Speech and Hearing, 14, 7-11.

## Appendix

### A 10<sup>th</sup> Standard Passage in Punjabi Language for Reading Task

‘ਬਾਬਾ ਨਾਨਕ ਆਪਣੇ ਧਿਆਨ ਵਿਚ ਮਗਨ ਤੁਰਦੇ ਜਾ ਰਹੇ ਸਨ ਕਿ ਮਰਦਾਨੇ ਨੂੰ ਖਿਆਸ ਆਣ ਲੱਗੀ। ਪਰ ਉਥੇ ਪਾਣੀ ਕਿਥੇ! ਬਾਬੇ ਨੇ ਕਿਹਾ, ਮਰਦਾਨਿਆ ਸਬਰ ਕਰ ਲੈ, ਅਗਲੇ ਪਿੰਡ ਪੁਜ ਕੇ ਤੂੰ ਜਿਤਨਾ ਤੇਰਾ ਜੀਅ ਚਾਹੇ ਪਾਣੀ ਪੀ ਲਵੀਂ। ਪਰ ਮਰਦਾਨੇ ਨੂੰ ਤੇ ਡਾਢੀ ਖਿਆਸ ਲੱਗੀ ਹੋਈ ਸੀ। ਬਾਬਾ ਨਾਨਕ ਇਹ ਸੁਣ ਕੇ ਡਿਕਰਮੰਦ ਹੋਏ। ਇਸ ਜੰਗਲ ਵਿਚ ਪਾਣੀ ਤਾਂ ਦੂਰ ਦੂਰ ਤੀਕ ਨਹੀਂ ਸੀ ਤੇ ਜਦੋਂ ਮਰਦਾਨਾ ਅੜੀ ਕਰ ਬਹਿੰਦਾ ਤਾਂ ਸਭ ਲਈ ਬੜੀ ਮੁਸ਼ਕਲ ਕਰ ਦਿੰਦਾ ਸੀ। ਬਾਬੇ ਨੇ ਫੇਰ ਸਮਝਾਇਆ, ਮਰਦਾਨਿਆ ਏਥੇ ਪਾਣੀ ਕਿਤੇ ਵੀ ਨਹੀਂ, ਤੂੰ ਸਬਰ ਕਰ ਲੈ, ਰੱਬ ਦਾ ਡਾਣਾ ਮੰਨ! ਪਰ ਮਰਦਾਨਾ ਤਾਂ ਉਥੇ ਦਾ ਉਥੇ ਹੀ ਬੈਠ ਗਿਆ। ਇਕ ਕਦਮ ਹੋਰ ਉਸ ਤੋਂ ਅੱਗੇ ਨਹੀਂ ਸੀ ਤੁਰਿਆ ਜਾਂਦਾ। ਬਾਬਾ ਡਾਢਾ ਜਿੱਚ ਪਿਆ। ਗੁਰੂ ਨਾਨਕ ਮਰਦਾਨੇ ਦੀ ਜਿੰਦ ਨੂੰ ਵੇਖ ਖੁੜ ਖੁੜ ਮੁਸਕਰਾਉਂਦੇ, ਹੈਰਾਨ ਪਏ ਹੁੰਦੇ। ਆਖ਼ਰ ਜਦੋਂ ਬਾਬੇ ਨੇ ਮਰਦਾਨੇ ਨੂੰ ਕਿਸੇ ਕੋਲੀ ਵਿਚ ਆਉਂਦੇ ਨਾ ਵੇਖਿਆ ਤਾਂ ਉਹ ਅੰਤਰ-ਧਿਆਨ ਹੋ ਗਏ। ਜਦੋਂ ਗੁਰੂ ਨਾਨਕ ਦੀ ਅੱਖ ਖੁੱਲੀ, ਮਰਦਾਨਾ ਮੱਛੀ ਵਾਂਗ ਤੜਫ ਰਿਹਾ ਸੀ। ਸਤਿਗੁਰੂ ਉਸ ਨੂੰ ਵੇਖ ਕੇ ਮੁਸਕਰਾਏ ਤੇ ਕਹਿਣ ਲੱਗੇ, ਡਾਈ ਮਰਦਾਨਿਆ! ਇਸ ਪਹਾੜੀ ਉੱਤੇ ਇਕ ਕੁਟੀਆ ਹੈ, ਜਿਸ ਵਿਚ ਵਲੀ ਕੰਧਾਰੀ ਨਾਂ ਦਾ ਇਕ ਦਰਵੇਸ਼ ਰਹਿੰਦਾ ਹੈ। ਜੇ ਤੂੰ ਉਹਦੇ ਕੋਲ ਜਾਏਂ ਤਾਂ ਤੈਨੂੰ ਪਾਣੀ ਮਿਲ ਸਕਦਾ ਹੈ। ਇਸ ਇਲਾਕੇ ਵਿਚ ਬਸ ਇਕ ਉਹਦਾ ਖੂਹ ਪਾਣੀ ਨਾਲ ਭਰਿਆ ਹੋਇਆ ਹੈ, ਹੋਰ ਕਿਤੇ ਵੀ ਪਾਣੀ ਨਹੀਂ।’

“ਤੇ ਫਿਰ ਅੰਮੀ?” ਮੈਂ ਬੇਚੈਨ ਹੋ ਰਿਹਾ ਸਾਂ ਇਹ ਜਾਣਨ ਲਈ ਕਿ ਮਰਦਾਨੇ ਨੂੰ ਪਾਣੀ ਮਿਲਦਾ ਹੈ ਕਿ ਨਹੀਂ।

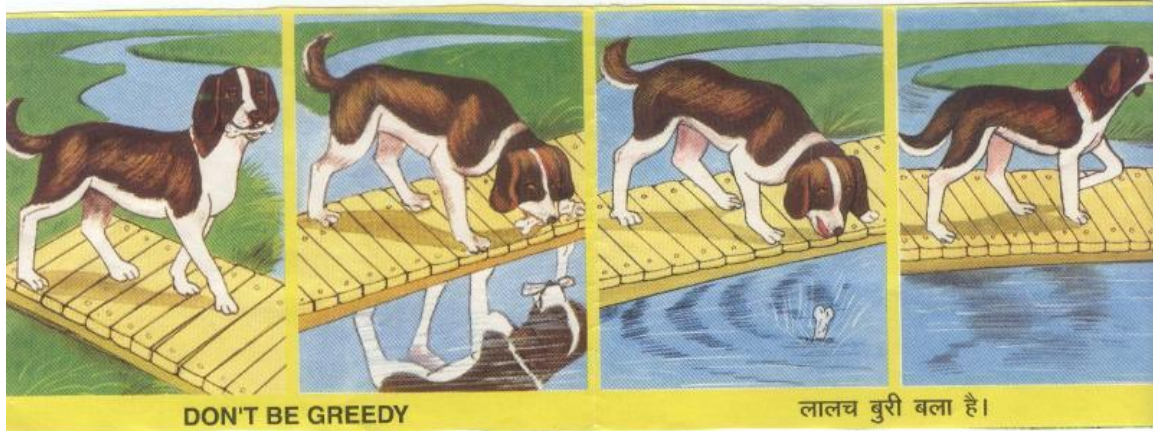
“ਮਰਦਾਨੇ ਨੂੰ ਖਿਆਸ ਡਾਢੀ ਲੱਗੀ ਹੋਈ ਸੀ, ਸੁਣਦਿਆਂ ਸਾਰ ਪਹਾੜੀ ਵੱਲ ਦੌੜ ਪਿਆ। ਕੜਕਦੀ ਦੁਪਹਿਰ, ਇਧਰ ਖਿਆਸ, ਉਧਰ ਪਹਾੜੀ ਦਾ ਸਫ਼ਰ, ਸਾਹੋ-ਸਾਹ, ਪਸੀਨੋ-ਪਸੀਨਾ ਹੋਇਆ ਮਰਦਾਨਾ ਬੜੀ ਮੁਸ਼ਕਲ ਨਾਲ ਉਥੇ ਪੁੱਜਾ ਵਲੀ ਕੰਧਾਰੀ ਨੂੰ ਸਲਾਮ ਕਰ ਕੇ ਉਸ ਪਾਣੀ ਲਈ ਬੇਨਤੀ ਕੀਤੀ। ਵਲੀ ਕੰਧਾਰੀ ਨੇ ਖੂਹ ਵੱਲ ਇਸ਼ਾਰਾ ਕੀਤਾ। ਜਦੋਂ ਮਰਦਾਨਾ ਖੂਹ ਵੱਲ ਜਾਣ ਲੱਗਾ ਤਾਂ ਵਲੀ ਕੰਧਾਰੀ ਦੇ ਮਨ ਵਿਚ ਕੁਝ ਆਇਆ ਤੇ ਉਸ ਮਰਦਾਨੇ ਤੋਂ ਪੁੱਛਿਆ, ਭੁਲੇ ਲੋਕ ਤੂੰ ਕਿਥੋਂ ਆਇਆ ਏ? ਮਰਦਾਨੇ ਨੇ ਕਿਹਾ, ਮੈਂ ਨਾਨਕ ਪੁਰ ਦਾ ਸਾਥੀ ਹਾਂ। ਅਸੀਂ ਤੁਰਦੇ ਤੁਰਦੇ ਇਧਰ ਆ ਨਿਕਲੇ ਹਾਂ। ਮੈਨੂੰ ਖਿਆਸ ਡਾਢੀ ਲੱਗੀ ਹੈ ਤੇ ਹੇਠ ਕਿਤੇ ਪਾਣੀ ਨਹੀਂ। ਬਾਬੇ ਨਾਨਕ ਦਾ ਨਾਂ ਸੁਣ ਕੇ ਵਲੀ ਕੰਧਾਰੀ ਨੂੰ ਜਿਵੇਂ ਅੱਗ ਲਗ ਗਈ ਤੇ ਉਸ ਮਰਦਾਨੇ ਨੂੰ ਆਪਣੀ ਕੁਟੀਆ ਵਿਚੋਂ ਉੱਜ ਦਾ ਉੱਜ ਬਾਹਰ ਕੱਢ ਦਿੱਤਾ। ਥੱਕਿਆ ਹਾਰਿਆ ਮਰਦਾਨਾ ਹੇਠ ਬਾਬੇ ਨਾਨਕ ਕੋਲ ਆ ਕੇ ਫ਼ਰਿਆਦੀ ਹੋਇਆ। ਬਾਬੇ ਨੇ ਉਸ ਤੋਂ ਸਾਰੀ ਵਿਥਿਆ ਸੁਣੀ ਤੇ ਮੁਸਕਰਾ ਪਏ। ਮਰਦਾਨਿਆ, ਤੂੰ ਇਕ ਵਾਰ ਫੇਰ ਜਾ, ਬਾਬੇ ਨਾਨਕ ਨੇ ਮਰਦਾਨੇ ਨੂੰ ਸਲਾਹ ਦਿੱਤੀ। ਏਸ ਵਾਰ ਤੂੰ ਨਿਮਰਤਾ ਨਾਲ ਝਿਕਾ ਦਿਲ ਲੈ ਕੇ ਜਾ। ਕਹੀਂ, ਮੈਂ ਨਾਨਕ ਦਰਵੇਸ਼ ਦਾ ਸਾਥੀ ਹਾਂ। ਮਰਦਾਨੇ ਨੂੰ ਖਿਆਸ ਡਾਢੀ ਲੱਗੀ ਸੀ। ਪਾਣੀ ਹੋਰ ਕਿਤੇ ਸੀ ਨਹੀਂ। ਖਪਦਾ, ਕ੍ਰਿਝਦਾ, ਸ਼ਕਾਇਤਾਂ ਕਰਦਾ ਫੇਰ ਉੱਤੇ ਤੁਰ ਪਿਆ। ਪਰ ਪਾਣੀ ਵਲੀ ਕੰਧਾਰੀ ਨੇ ਫੇਰ ਵੀ ਨਾ ਦਿੱਤਾ। ਮੈਂ ਇਕ ਕਾਫ਼ਰ ਦੇ ਸਾਥੀ ਨੂੰ ਪਾਣੀ ਦੀ ਚੁਲੀ ਨਹੀਂ ਦਿਆਂਗਾ, ਵਲੀ ਕੰਧਾਰੀ ਨੇ ਮਰਦਾਨੇ ਨੂੰ ਫੇਰ ਉੱਜ ਦਾ ਉੱਜ ਮੋੜ ਦਿੱਤਾ। ਜਦੋਂ ਮਰਦਾਨਾ ਇਸ ਵਾਰ ਹੇਠ ਆਇਆ ਤਾਂ ਉਸ ਦਾ ਬੁਰਾ ਹਾਲ ਹੋ ਰਿਹਾ ਸੀ। ਉਸ ਦੇ ਹੋਠਾਂ ‘ਤੇ ਖਪੜੀ ਜੰਮੀ ਹੋਈ ਸੀ। ਮੂੰਹ ‘ਤੇ ਤਰੇਲੀਆਂ ਛੁੱਟ ਰਹੀਆਂ ਸਨ। ਇੰਜ ਜਾਪਦਾ ਸੀ, ਮਰਦਾਨਾ ਬਸ ਘੜੀ ਹੈ ਕਿ ਪਲ ਹੈ। ਬਾਬੇ ਨਾਨਕ ਨੇ ਸਾਰੀ ਗੱਲ ਸੁਣੀ ਤੇ ਮਰਦਾਨੇ ਨੂੰ ‘ਧੰਨ ਨਿਰੰਕਾਰ’ ਕਹਿ ਕੇ ਇਕ ਵਾਰ ਫੇਰ ਵਲੀ ਕੰਧਾਰੀ ਕੋਲ ਜਾਣ ਲਈ ਕਿਹਾ। ਹੁਕਮ ਦਾ ਬੱਧਾ ਮਰਦਾਨਾ ਤੁਰ ਪਿਆ। ਪਰ ਉਸ ਨੂੰ ਪਤਾ ਸੀ ਕਿ ਉਸ ਦੀ ਜਾਨ ਰਸਤੇ ਵਿਚ ਹੀ ਕਿਤੇ ਨਿਕਲ ਜਾਵੇਗੀ। ਮਰਦਾਨਾ ਤੀਜੀ



ਵਾਰ ਪਹਾੜੀ ਦੀ ਚੋਟੀ 'ਤੇ ਵਲੀ ਕੰਧਾਰੀ ਦੇ ਚਰਨਾਂ ਵਿਚ ਜਾ ਕੇ ਡਿੱਗਾ ਪਰ ਕ੍ਰੋਧ ਵਿਚ ਬਲ ਰਹੇ ਫਕੀਰ ਨੇ ਉਸ ਦੀ ਬੇਨਤੀ ਨੂੰ ਇਸ ਵਾਰ ਵੀ ਠੁੱਕਰਾ ਦਿੱਤਾ। ਨਾਨਕ ਆਪਣੇ ਆਪ ਨੂੰ ਪੀਰ ਅਖਵਾਉਂਦਾ ਹੈ ਤੇ ਆਪਣੇ ਮੁਰੀਦ ਨੂੰ ਪਾਣੀ ਦਾ ਘੁਟ ਨਹੀਂ ਪਿਲਾ ਸਕਦਾ? ਵਲੀ ਕੰਧਾਰੀ ਨੇ ਲੱਖ ਲੱਖ ਸੁਣਾਵਤਾਂ ਸੁਣੀਆਂ। ਮਰਦਾਨਾ ਇਸ ਵਾਰ ਜਦੋਂ ਹੇਠ ਪੁੱਜਾ, ਪਿਆਸ ਵਿਚ ਬੇਹਬਲ ਬਾਬੇ ਨਾਨਕ ਦੇ ਚਰਨਾਂ ਵਿਚ ਉਹ ਬੇਹੋਸ਼ ਹੋ ਗਿਆ। ਗੁਰੂ ਨਾਨਕ ਨੇ ਮਰਦਾਨੇ ਦੀ ਕੰਡ 'ਤੇ ਹੱਥ ਫੇਰਿਆ, ਉਸ ਨੂੰ ਹੋਸਲਾ ਦਿੱਤਾ ਤੇ ਜਦੋਂ ਮਰਦਾਨੇ ਨੇ ਅੱਖ ਖੋਲੀ, ਬਾਬੇ ਨੇ ਉਹਨੂੰ ਸਾਹਮਣੇ ਇਕ ਪੱਥਰ ਪੁੱਟਣ ਲਈ ਕਿਹਾ। ਮਰਦਾਨੇ ਨੇ ਪੱਥਰ ਪੁੱਟਿਆ ਤੇ ਹੇਠ ਪਾਣੀ ਦਾ ਝਰਨਾ ਫੁੱਟ ਨਿਕਲਿਆ। ਜਿਵੇਂ ਨਹਿਰ ਪਾਣੀ ਦੀ ਵਗਣ ਲੱਗ ਪਈ। ਤੇ ਵੇਖਦਿਆਂ ਵੇਖਦਿਆਂ ਚੜ੍ਹਾਂ ਪਾਸੇ ਪਾਣੀ ਹੀ ਪਾਣੀ ਹੋ ਗਿਆ। ਇਤਨੇ ਵਿਚ ਵਲੀ ਕੰਧਾਰੀ ਨੂੰ ਪਾਣੀ ਦੀ ਲੋੜ ਪਈ। ਪੂਰ ਵਿਚ ਵੇਖੇ ਤਾਂ ਪਾਣੀ ਦੀ ਇਕ ਸਿਪ ਵੀ ਨਹੀਂ ਸੀ। ਵਲੀ ਕੰਧਾਰੀ ਡਾਢਾ ਅਸਚਰਜ ਹੋਇਆ। ਤੇ ਹੇਠ ਪਹਾੜੀ ਦੇ ਕਦਮਾਂ ਵਿਚ ਕੱਠੇ ਵਗ ਰਹੇ ਸਨ, ਚਸ਼ਮੇ ਫੁਟੇ ਹੋਏ ਸਨ। ਦੂਰ ਬਹੁਤ ਦੂਰ ਇਕ ਕਿੱਕਰ ਹੇਠ ਵਲੀ ਕੰਧਾਰੀ ਨੇ ਵੇਖਿਆ, ਬਾਬਾ ਨਾਨਕ ਤੇ ਉਸ ਦਾ ਸਾਥੀ ਬੈਠੇ ਸਨ। ਗੁੱਸੇ ਵਿਚ ਆ ਕੇ ਵਲੀ ਨੇ ਚਟਾਨ ਦੇ ਇਕ ਟੁਕੜੇ ਨੂੰ ਆਪਣੇ ਪੂਰੇ ਜ਼ੋਰ ਨਾਲ ਉਤੋਂ ਰੋੜ੍ਹਿਆ। ਇੰਜ ਪਹਾੜੀ ਦੀ ਪਹਾੜੀ ਨੂੰ ਆਪਣੀ ਵੱਲ ਆਖੁਦਾ। ਵੇਖ ਮਰਦਾਨਾ ਚਿਚਲਾ ਉਠਿਆ। ਬਾਬੇ ਨਾਨਕ ਨੇ ਠਰ੍ਹੇਮੇ ਨਾਲ ਮਰਦਾਨੇ ਨੂੰ 'ਧੰਨ ਨਿਰੰਕਾਰ' ਕਹਿਣ ਲਈ ਕਿਹਾ ਤੇ ਜਦੋਂ ਪਹਾੜੀ ਦਾ ਟੁਕੜਾ ਬਾਬੇ ਦੇ ਸਿਰ ਕੋਲ ਆਇਆ, ਗੁਰੂ ਨਾਨਕ ਨੇ ਉਸ ਨੂੰ ਹੱਥ ਦੇ ਕੇ ਆਪਣੇ ਪੰਜੇ ਨਾਲ ਰੋਕ ਲਿਆ। ਤੇ ਹਸਨ ਅਬਦਾਲ ਵਿਚ, ਜਿਸ ਦਾ ਨਾਂ ਹੁਣ ਪੰਜਾ ਸਾਹਿਬ ਹੈ, ਅਜੇ ਤੀਕ ਪਹਾੜੀ ਦੇ ਟੁਕੜੇ 'ਤੇ ਬਾਬੇ ਨਾਨਕ ਦਾ ਪੰਜਾ ਲੱਗਿਆ ਹੋਇਆ ਹੈ।"

## Figures

Story ( A Greedy Dog ) for the picture description task



(a)

(b)

(c)

(d)

## Tables

Table (1)

Comparison between rate in reading and picture description tasks (WPM) in males

Language 11 : 1 J Deepti Rate of	WPM(Words per minute)	Reading		Picture description		t value
		Mean	S.D.	Mean	S.D.	
			159.456	19.958	135.818	24.338
	SPM(Syllables per minute)	253.893	31.776	206.694	37.543	4.58

187

a, Ph.D.

As  $p < .05$  therefore there is a significant difference between reading and picture description tasks in males in correspondence to WPM and SPM respectively.

**Table 2**

**Comparison between reading and picture description tasks (WPS) in males**

WPS(Words per second)	Reading		Picture description		t value
	Mean	S.D.	Mean	S.D.	
	2.654	0.332	2.255	0.399	3.632
SPS(Syllables per second)	4.226	0.53	3.433	0.618	4.602

As  $p < .05$  therefore there is significant difference between reading and picture description tasks in males in correspondence to WPS and SPS respectively.

**Table 3**

**Comparison between reading and picture description tasks (WPM) in females**

WPM(Words per minute)	Reading		Picture description		t value
	Mean	S.D.	Mean	S.D.	
	159.345	19.959	140.08	14.724	4.282
SPM(Syllables per minute)	253.726	31.763	206.998	23.541	6.18

As  $p < .05$ , therefore there is significant difference between reading and picture description tasks in females in correspondence to WPM and SPM respectively.

**Table 4**

### Comparison between reading and picture description tasks (WPS) in females

WPS(Words per second)	Reading		Picture description		t value
	Mean	S.D.	Mean	S.D.	
	2.652	0.333	2.331	0.246	
SPS(Syllables per second)	4.227	0.531	3.444	0.395	6.17

As  $p < .05$ , therefore there is significant difference between reading and picture description tasks in females in correspondence to WPS and SPS respectively.

**Table 5**

### Comparison between rate of speech of males and females in reading tasks (WPM)

WPM(Words Per minute)	Male		Female		t value
	Mean	S.D.	Mean	S.D.	
	159.456	19.958	159.345	19.96	
SPM(Syllables Per minute)	253.893	31.776	253.726	31.763	0.01

As  $p > .05$ , therefore there is no significant difference between Males and Females in reading tasks in both WPM and SPM respectively.

**Table 6**

### Comparison between males and females in reading tasks (WPS)

WPS(Words Per second)	Male		Female		t value
	Mean	S.D.	Mean	S.D.	
	2.654	0.332	2.652	0.333	
SPS(Syllables Per second)	4.222	0.530	4.227	0.531	0.004

As  $p > .05$ , there is no significant difference between Males and Females in reading tasks in both WPS and SPS respectively

**Table 7**

### Comparison between males and females in picture description (WPM)

WPM(Words Per minute)	Male		Female		t value
	Mean	S.D.	Mean	S.D.	
	135.82	24.339	140.08	14.725	0.481
SPM(Syllables Per minute)	206.69	37.544	206.99	23.541	0.02

As  $p > .05$ , therefore there is no significant difference between males and females in picture description.

**Table 8**

**Comparison between males and females in picture description (WPS)**

WPS(Words Per second)	Male		Female		t value
	Mean	S.D.	Mean	S.D.	
	2.255	0.399	2.331	0.246	0.519
SPS (Syllables Per second)	3.433	0.618	3.444	0.4	0.051

As  $p > .05$ , therefore there is no significant difference between male and female in picture description.

=====

Deepti Kaushal, B.Sc. (AST)  
Speech and Hearing Unit  
Department of ENT  
PGIMER  
Chandigarh  
[deeptiaslp@yahoo.co.in](mailto:deeptiaslp@yahoo.co.in)

Anuradha Sharma, M.Sc. (AandSR)  
Speech and Hearing Unit  
Department of ENT  
PGIMER  
Chandigarh  
[anuradha2ks@yahoo.com](mailto:anuradha2ks@yahoo.com)

Sanjay Munjal, Ph.D. (Audiology)  
Speech and Hearing Unit  
Department of ENT  
PGIMER

Chandigarh  
[sanjaymunjal@hotmail.com](mailto:sanjaymunjal@hotmail.com)  
[sanjaymunjal@rediffmail.com](mailto:sanjaymunjal@rediffmail.com)

Naresh Panda, Ph.D. (Audiology)  
Speech and Hearing Unit  
Department of ENT  
PGIMER  
Chandigarh  
[npanda59@yahoo.co.in](mailto:npanda59@yahoo.co.in)